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# Strain Index for the Uniform Soybean Tests: Northern States, 1939 to 1990

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# **Strain Index for the Uniform Soybean Tests: Northern States, 1939 to 1990**

**R.L. Bernard, S.K. St. Martin,  
J.R. Wilcox, and P.I. Morgan**

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## ABSTRACT

R.L. Bernard, S.K. St. Martin, J.R. Wilcox, and P.I. Morgan. 1995. Strain Index for the Uniform Soybean Tests, Northern States, 1939 to 1990. U.S. Department of Agriculture, Technical Bulletin No. 1846, 148 pp.

This publication provides an index to the 4,836 different entries during the 52 years of the Uniform Soybean Tests for the northern states. Of these entries 4,775 were experimental lines, 213 of which have been named and released for commercial production. Sixty-one entries were commercial varieties from other sources entered as checks for comparison. The tests (year and maturity group), source, and parentage are given for each strain. This index is a reference for researchers seeking performance data or tracing the development and ancestry of the soybean in the northern United States and Canada.

**Keywords:** soybean, *Glycine max*, variety, cultivar, breeding.

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We appreciate the efforts of the soybean researchers who reviewed the portions of the index pertaining to varieties that their institution or company produces or has produced. We also thank the following persons who have served as coordinators of the northern regional tests: Jackson L. Cartter, 1939 to 1965, USDA-ARS and University of Illinois; Leonard F. Williams, 1939 to 1959, USDA-ARS and University of Illinois; Robert D. Osler, 1951 to 1953, USDA-ARS and University of Illinois; Richard L. Bernard, 1954 to 1973, USDA-ARS and University of Illinois; James R. Wilcox, 1974 to present, USDA-ARS and Purdue University. Overlapping periods indicate that two individuals shared the responsibilities of the coordinator.

Others who assisted in preparing the annual reports are Ruth E. Lawrence, Carolyn A. Younger, Donald W. Chamberlain, and Donald A. Lindahl at the University of Illinois and Ronald J. Martin, Anne D. Knapp, and William T. Schapaugh, Jr., at Purdue University.

Issued November 1995

## DESCRIPTION OF THE TESTS AND INDICES

The Uniform Regional Soybean Tests are conducted each year by researchers in the United States and Canada in cooperation with the U.S. Department of Agriculture. The results of these tests are summarized annually each winter in two publications entitled *The Uniform Soybean Tests: Northern States* and *The Uniform Soybean Tests: Southern Region*.

This publication includes all 4,836 strains in the northern tests (maturity groups 00 to IV) in the 52 years of tests from 1939 to 1990. The strains originated from 4,775 breeding lines (including two blends), 213 of which have been named and released for commercial production. In addition 61 commercial varieties from other sources are included for comparison (including three from the Southern Uniform Soybean Tests).

Introductory tables give the numbers of strains and location for each test and a list of the prefix codes used to designate strains. In the index the parentages and the year and maturity group in which each line was tested are given for each entry. The parent strain tables (pp. 124–138) give parentage and source information for strains not in the northern regional tests.

Strain designations that used only the last digit of the year of selection are listed with the last two digits to avoid confusion between decades. Thus, A1–939 (a 1961 entry) is listed as A61–939. Tests are designated by the last two digits of the year and by maturity group, with the letter P designating a preliminary test. For example, the entry 77 PII, 78 II indicates that a strain was entered in Preliminary Test II in 1977 and in Uniform Test II in 1978. Sometimes preliminary tests were divided into an A and B test. Check varieties that were in the preliminary test and uniform test of the same maturity group in the same year are listed for the uniform test only.

Soybean researchers in many states and provinces have reviewed the entries pertaining to varieties that their institution or company produces or has produced. As a result of their efforts, parentages have been corrected in some cases, and a correction is noted by an asterisk in the index. Any errors remaining should be brought to the attention of one of the authors so that future publications will be corrected and an erratum list can be produced. Addresses for the authors are listed on the title page of this publication.

### NUMBER OF ENTRIES PER TEST

Year	Uniform Tests					Total	Preliminary Tests *					Total	
	00	0	I	II	III	IV	00	0	I	II	III	IV	
1939	-	-	-	23	-	32	55	-	-	-	-	-	--
1940	-	-	-	25	16	22	63	-	-	-	-	-	--
1941	-	-	-	24	16	24	64	-	-	-	-	-	--
1942	-	-	20	20	24	24	88	-	-	-	-	-	--
1943	-	-	25	16	25	9	75	-	-	-	-	-	--
1944	-	12	16	25	20	9	82	-	-	-	-	-	26
1945	-	16	16	18	13	18	81	-	-	-	-	-	--
1946	-	17	16	30	10	16	89	-	-	-	-	-	--
1947	-	11	13	14	11	11	60	-	18	18	-	-	32/39
1948	-	12	14	18	8	13	65	-	17	27	-	15	31
1949	-	13	15	20	11	11	70	-	12	16	-	-	16
1950	-	18	18	20	10	8	74	-	-	-	-	14	23
1951	-	15	13	13	16	18	75	-	-	-	-	-	--
1952	-	13	10	14	15	10	62	-	-	-	-	-	--
1953	-	14	8	14	10	10	56	-	-	-	-	-	17
1954	-	15	8	16	10	14	63	-	-	17	-	-	17
1955	-	17	9	16	10	14	66	-	-	+10	+14	-	+24
1956	-	17	9	23	16	16	81	-	-	+9	+11	+8	+8
1957	-	6	7	15	13	11	52	-	+4	+9	+13	+18	+11
1958	5	7	9	14	8	8	50	-	16	-	-	11	16
1959	14	6	6	14	9	9	58	-	-	-	12	11	-
1960	10	5	3	11	10	8	47	10	9	8	25	16	17
1961	12	6	6	17	11	12	64	-	6	12	10	8	29
1962	6	8	9	19	10	17	69	10	6	7	8	15	14
1963	8	10	10	18	11	9	66	6	9	15	8	9	10
1964	9	14	10	10	9	10	62	17	9	15	13	11	20
1965	16	13	11	15	7	11	73	13	-	10	11	8	-
1966	11	6	11	13	11	8	60	11	18	13	16	11	9
1967	9	12	11	12	10	7	61	11	19	16	15	6	9
1968	9	16	11	10	5	8	59	11	10	24	9	13	14
1969	9	11	14	12	7	12	65	9	13	16	-	10	31
1970	6	8	12	5	8	9	48	13	10	38	44	16	22
1971	9	12	12	4	5	9	51	11	4	19	27	8	9
1972	10	9	9	9	8	6	51	-	9	8	8	17	16
1973	8	8	9	7	10	8	50	-	5	22	19	34	19
1974	5	8	12	8	14	12	59	-	9	30	36	36	36
1975	7	9	12	13	13	10	64	-	8	24	36	36	27
1976	8	13	16	14	18	11	80	-	-	27	36	36	28
1977	7	10	16	23	29	14	99	-	-	26	35	36	36
1978	8	10	13	23	24	14	92	-	-	30	36	36	36
1979	13	15	12	19	24	17	100	-	-	32	36	36	28
1980	9	19	10	17	22	14	91	-	-	29	30	36	36
1981	10	18	12	16	21	17	94	-	-	32	25/26	29/30	34
1982	9	18	16	29	27	26	125	-	-	26	31/31	35/35	35
1983	7	15	14	32	29	23	120	-	-	26	35/36	39/40	46
1984	6	17	15	29	32	22	121	-	-	26	32/30	32/32	25/27
1985	12	36	15	32	27	21	132	-	-	34	36/36	40/40	28/28
1986	20	27	10	15	25	18	115	-	-	26	36/37	37/36	25/25
1987	15	34	16	19	30	16	130	-	-	40	40/40	40/40	46
1988	17	33	18	26	29	19	142	-	-	34	33/39	36/40	30/29
1989	15	29	19	31	35	29	158	-	-	32	33/33	38/38	29/29
1990	15	27	20	30	30	24	146	-	-	34	40/37	36/38	28/32

\*In the 1955-57 tests preliminary entries were grown in the respective Uniform Tests as additional entries.

**NUMBER OF TEST LOCATIONS**

Year	Uniform Tests					Total	Preliminary Tests					Total	
	00	0	I	II	III	IV	00	0	I	II	III	IV	
1939	-	-	-	8	-	11	19	-	-	-	-	-	--
1940	-	-	-	9	10	9	28	-	-	-	-	-	--
1941	-	-	-	11	12	11	34	-	-	-	-	-	--
1942	-	-	4	15	14	10	43	-	-	-	-	-	--
1943	-	-	12	19	17	12	60	-	-	-	-	-	--
1944	-	7	9	17	14	11	58	-	-	-	-	6	6
1945	-	8	11	18	19	17	73	-	-	-	-	-	--
1946	-	9	10	22	21	18	80	-	-	-	-	-	--
1947	-	10	10	19	19	16	74	-	4	3	-	-	5/5
1948	-	8	12	18	21	17	76	-	6	5	-	5	6
1949	-	15	14	21	21	15	86	-	8	6	-	-	6
1950	-	13	14	23	22	13	85	-	-	-	-	4	6
1951	-	12	14	25	26	16	90	-	-	-	-	-	--
1952	-	14	18	23	22	17	94	-	-	-	-	-	--
1953	-	12	15	23	23	16	89	-	-	-	-	-	4
1954	-	14	18	24	21	14	91	-	-	9	-	-	9
1955	-	10	14	23	24	15	86	-	-	-	14	7	-
1956	-	13	15	23	21	15	87	-	-	9	9	7	6
1957	-	18	15	27	15	9	84	-	12	11	11	9	5
1958	17	18	17	26	23	16	117	-	-	13	10	8	31
1959	18	18	18	26	22	14	116	7	-	-	23	23	9
1960	20	13	19	27	21	16	116	7	7	10	12	12	9
1961	17	17	22	27	22	13	118	-	12	15	14	12	9
1962	10	15	20	29	19	13	106	6	9	13	13	13	6
1963	13	13	20	28	23	16	113	10	8	11	15	13	9
1964	10	12	20	30	23	15	110	8	9	13	17	13	10
1965	8	11	21	30	28	20	118	7	-	13	17	16	-
1966	11	12	23	35	36	28	145	8	8	12	18	17	12
1967	12	12	22	32	34	29	141	9	8	13	17	19	12
1968	11	12	25	36	38	30	152	7	6	14	20	23	16
1969	12	11	22	34	34	31	144	9	8	15	-	21	19
1970	11	12	24	36	31	30	144	9	8	15	17	15	12
1971	11	13	26	40	36	32	158	8	8	11	12	11	11
1972	10	12	22	32	30	29	135	-	9	11	11	10	10
1973	9	7	16	29	32	26	119	-	7	10	12	10	12
1974	9	8	20	28	28	27	120	-	5	12	13	11	11
1975	11	9	18	26	28	27	119	-	8	10	11	10	9
1976	9	10	14	27	23	25	108	-	-	8	11	10	10
1977	8	9	15	24	22	24	102	-	-	8	10	10	9
1978	8	9	14	21	26	23	101	-	-	9	11	9	9
1979	9	7	14	22	25	24	101	-	-	9	11	10	8
1980	8	8	13	22	23	21	95	-	-	9	12	10	10
1981	7	7	13	22	21	16	86	-	-	9	10	10	6
1982	8	8	14	24	25	20	99	-	-	9	11	9	8
1983	8	8	15	22	23	18	94	-	-	8	10	10	6
1984	7	8	13	21	22	18	89	-	-	7	10	8	7
1985	8	9	14	21	21	18	91	-	-	7	10	9	8
1986	8	9	13	21	21	18	90	-	-	8	10	7	8
1987	8	8	15	22	22	19	94	-	-	8	10	8	8
1988	7	9	15	22	23	19	95	-	-	7	11	8	9
1989	8	9	16	22	21	19	95	-	-	7	12	9	8
1990	8	7	14	22	25	19	95	-	-	7	13	10	10

### PREFIXES USED IN STRAIN DESIGNATIONS AND NUMBER OF ENTRIES

<u>Page</u>	<u>Prefixes*</u>	<u>Institution</u>	<u>Number of Entries</u>	<u>Number Released</u>
5	A,AC,AM,AP, AX,(IX)	Iowa A.E.S.	1017	42
26	C,CPRX,CX (MM,PRX)	Purdue (Indiana) A.E.S.	641	24
40	CM	Ag. Canada, Morden, Manitoba	51	1
41	Cornell	New York A.E.S.	4	0
41	D	Mississippi A.E.S.	10	0
42	E	Michigan A.E.S.	45	0
43	H,HA,HC,HM,HS, HW,HX,(PMGT)	Ohio A.R.D.C.	638	24
-	J	Delta Branch A.E.S. and West Tennessee E.S.	0	0
56	K	Kansas A.E.S.	143	6
59	Ky	Kentucky A.E.S.	26	1
60	L,LG,LL,LN,LX, (D)	Illinois A.E.S.	847	31
78	LS	Southern Illinois University	48	2
79	M,(II,JA,KA,ML)	Minnesota A.E.S.	558	28
90	Md	Maryland A.E.S.	55	5
91	Me	Maine A.E.S.	4	0
-	N	North Carolina A.E.S.	0	0
91	ND(F until 1955)	North Dakota A.E.S.	32	0
92	O,OT (BC,BD,DO,P)	Ag. Canada, Ottawa, Ontario	51	10
93	O,OX	Ag. Canada, Harrow, Ontario	14	5
94	OAC,(FH)	University of Guelph, Ontario	8	3
94	ORC	Ridgetown College, Ontario	15	4
94	PI	USDA Plant Introduction Office	27	3
-	R	Arkansas A.E.S.	0	0
95	S,SS	Missouri A.E.S.	139	6
98	SD	South Dakota A.E.S.	23	1
99	SL,(AHW)	Two states cooperatively	16	2
-	T	Genetic Type Collection	0	0
99	U	Nebraska A.E.S.	167	6
103	UD	Delaware A.E.S.	38	3
104	UM	University of Manitoba	23	2
104	V	Virginia A.E.S.	7	0
104	W	Wisconsin A.E.S.	125	4
107	-	Miscellaneous (blends, others are counted above)	2	0
Total			4775	213
Other Varieties			61	--
Total Entries			4836	--

\*Non-standard prefixes are given in parentheses.

## INDEX OF EXPERIMENTAL STRAINS IN THE 1939 TO 1990 NORTHERN UNIFORM TESTS

<u>Strain</u>	<u>Tests</u>	<u>Parentage</u> (* = Incorrect in the U.T. Report)
A, AC, AM, AX:	Iowa A.E.S.	
Serial Numbers:		
A2=A74-101010	75 PI, 76-77 I	M63-17 x C1453
A3=A74-101035	75 PI, 76-77 I	C1426 x AP68-315
A4=A75-332035	76 PIII, 77 III	L15 x AP68-1016
A8=A80-344003	81,84 PIIIA,82-84 III	*A4 x Century
A20=A87-195034	89 I	BSR 101 x CN210
Cross-Line Numbers:		
A18-231	43 III	Dunfield x Linman 533
A31-291	43 III	Illini x Dunfield
A41-251	43 II	Mukden x "
A45-251	43-44,46-47 II	" x Richland; see A43-107 & 108
Year-Line Numbers:		
A43-9	44 III, 45 II	Illini x Dunfield
-10	44-45 II	Mukden x Richland
-14	44 II	Dunfield x Linman 533
-17	44 II	Mukden x Richland
-32	44 II	Richland x Linman 533
-33	44-45 II	Mukden x Richland
-61	44 III	Illini x Dunfield
-92	44 III	" x "
-93	44 II	Mukden x B. H. Manchu
-94	45-46 II	Dunfield x Linman 533
-107	44-46 II	from A45-251; see A44-107 sublines
-108	44-46 II	" " ; see A44-108 sublines
-109	44 II	Mukden x Richland
-117	44-45 III	Illini x Dunfield
-118	44 III	" x Richland
-127	44 III	Richland x Mandell
-128	44-45 III	" x "
-143	44 II	" x B. H. Manchu
-149	44-45 II	Dunfield x Linman 533
-163	44-45 III	" x Richland
-176	44-48 III, 47 II	Illini x Dunfield; see A45-2683 = Adams
-360-12	44 III	" x Mandell
-1411-20	44-45 III	Mukden x Dunfield
-27	44 III	" x "
-47	44 III	" x "
-1715-1	44 I	Mandarin x Richland
-3	44 I	" x "
-2015-28	44 II	Ontario x "
A43K-884	45-48 I	Mukden x " ; see A46K-937 = Blackhawk

A44-107-4	46 II	from A43-107; Hawkeye subline
-5	46 II	" " " "
-7	46 II	" " " "
-8	46 II	" " "
-12	46 II	" " " "
-108-6	46 II	from A43-108
-12	46 II	" " ";" "
-1128-7	46-47 I	Dunfield x Linman 533
-1715-32	46-47 I	Mandarin x Richland
-2015-3	46-47 I	Ontario x "
-2728-2	46-47 I	Manchuria 13177 x L34-12
A45-268	47 III	Mukden x Linman 533
-2683	=Adams (1948)	Illini x Dunfield; from A43-176
A46-440	48 PIII	Lincoln(2) x Richland
-549	48 PIII	" " x "
A46K-549	48 PI, 49-50 I, 51-52 II	" " x "
-937	=Blackhawk (1950)	Mukden x " ; from A43K-884
-1011	51-52 I	Lincoln(2) x "
-1329	50-51 I	" " x "
-1428	48-49 PI	" " x "
-1428-C4	58 I	" " x "
-1521	48-49 PI	" " x "
-1801	49 PI, 50-51 I	" " x "
-1810	48 PI	" " x "
-0649	48-49 PI	" " x "
A47-1953	49-50 III	" (3) x "
-2002	50 PIII	" " x "
-6102	49-50 II	" (2) x "
-6103	50 II, 51-52 III	" " x "
-6323	49 II	" " x "
-6402	51-52 III, 52 II	" " x " ; see A50-8618
-6520	49-50 II	" " x "
-6629	50 II, 51 III	" " x "
-6831	49 III	" " x "
-6905	49 II	" " x "
A50-8618	52-56 II, 52-56 III	" " x " ; from A47-6402
-8618-1	56 II, 56 III	" " x " ; purple flowered
-2	=Ford (1958)	" " x " ; white flowered
A50K-913	53 I	Richland x Mandarin (Ottawa)
-2206	53-56 I	Hawkeye x "
-3808	53-56 I	Lincoln(2) x Richland
A52-4008	56 PI, 57-59 II	Adams x Blackhawk
A53-6319	56 PIII, 57-59 III	" (2) x Hawkeye
-7743	55 PIII	Lincoln x Mandarin (Ottawa)
-7743-1	56 III	" x " "
-7820	55 PIII	" x Hawkeye
A54-3026	57 PII	Hawkeye x Capital
-3109	57 PII	" x "
-3215	57 PII	" x "
A54K-1243	57 PII	" x "

A54K-1347	57 PI	Adams x Capital
-1406	57 PII, 58 II	" x "
-1411	57 PII	" x Harly
-1433	57 PI	" x "
A55-5264	59 PII	" x Hawkeye
-5274	59 PII	" x "
-5515	59 PII, 60 III	Ogden x "
-5515-2	62 PII	" x "
-5629	60 PII, 61-63 II	Roanoke x "
-5629-4	62 PII	" x "
-5740	59 PII, 60 III	" x "
A5-6522	58 PIII	Capital x Clark
-7818	58 PII	Adams x "
-7823	58 PIII, 59-60 III	" x "
A58-932	61 PI, 62-63 II, 63 PII	Harosoy x Capital; see A61-438 & 439
-1234	61 PII	Hawkeye x Harosoy
-1322	61 PII	" x "
-1334	61,63 PI, 62-63 I	" x " ; see A61-540 = Hark
A59-512	61 PI	Adams x Chippewa
-619	62,64 PI, 63-64 I	Clark x " ; see A62-5405 = Rampage
-630	61 PI	" x "
-1112	61 PIII	Lincoln x "
-1144	62 PIII	Clark x "
A59K-2558	63-64 PI, 64 I	Hawkeye x " ; see A62-5504
A61-438	63 PII	Harosoy x Capital; from A58-932
-439	=Corsoy (1967)	" x " ; " "
-540	=Hark (1966)	Hawkeye x Harosoy; from A59-1334
-541	63 PI	" x " ; " "
-647	63 PII	Hawkeye x Clark; from AX50F40-2
-653	63 PII	" x " ; " "
-939	=Amsoy (1965)	Adams x Harosoy; from AX56P64-1
-945	64 PIII	Lincoln x "
-1051	= Provar (1969)	Harosoy x Clark
-1349	64 PIII	" x "
A62-5330	64 PI	Adams x Chippewa
-5405	= Rampage (1969)	Clark x " ; from A59-619
-5407	= Wirth (1969)	" x "
-5432	64 PIII, 65-67 III	" x "
-5440	65 PI, 66-67 I	Harosoy x "
-5504	64 PI, 65-66 I	Hawkeye x " ; from A59K-2558
A63-2204	65,67 PI	C1105 x A54-3159
-2237	65 PI	AX29-267-1-1-2 x A54-3159
-2414	65 PIII	Lindarin x A54-3159
-2437	65 PII	AX29-267-1-1-2 x A54-3159
-2439	65 PII	" x "
A66-1158-1	70 PII	Provar x F1(Harosoy 63 x FC 31.122)
-2	70 PII	" x " " x "
-1240-2	70 PI, 71 I	" x " " x PI 84.666-1)
-1319-1	70 PI	" x " " x PI 91.110-1)
-2	70 PI	" x " " x "

A66-1441-2	70 PI, 71 PII, 72 II	Provar x F1 (Harosoy 63 x PI 248.406)
-9	70 PII	" x " " "
-1457-3	70 PI	Harosoy 63 x PI 257.435
-1504-10	70 PI	Provar x F1(Harosoy 63 x PI 257.435)
-1746-5	70 PII	AX56P64-1 x FC 31.122
-8	70-71 PII	" x "
-9	70-71 PII, 72 II	" x "
-1855-2	70 PII	Provar x F1(AX56P64-1 x PI 257.435)
-1906-1	70-71 PII	" x F1(AX50F58-2 x FC 31.122)
-3	71 PII	" x " "
-1932-2	70 PII	" x " " x PI 84.666-1)
-1936-9	70 PI	" x " "
A72-101	73 PI	Corsoy x Wayne
-102	73 PI, 74 I	" x "
-105	73 PI	" x "
-106	73 PI, 74 I	" x "
-107	73 PI, 74 I	" x "
-108	73 PI	" x "
-109	73 PI	" x "
-110	73 PI	" x "
-111	73 PI	" x "
-114	73 PI	" x "
-119	73 PI	Amsoy x Provar
-120	73 PII	" x "
-125	73 PI, 74 I	" x "
-130	73 PI	" x "
-131	73 PI	Amsoy x Wayne
-133	73 PI	" x "
-212	73 PII	Hark x [(D49-2491(4) x Hawkeye) x (Ford x PI 68.708)]
-224	73 PII	Hark x AX248-12-1
-225	73 PII	" x "
-407	73 PIII	Corsoy x Wayne
-409	73 PIV, 74 IV	" x "
-410	73 PIV	" x "
-413	73 PIII	" x "
-417	73 PIII	" x "
-423	73 PIII	Amsoy x "
-425	73 PIII	" x "
-426	73 PIV	" x "
-428	73 PIII	" x "
-431	73 PIII	" x "
-507	73 PIII, 74 III	" x "
-508	73 PIV	" x "
-509	73 PIII, 74 III	" x "
-510	73 PIII, 74 III	" x "
-511	73 PIV, 74 IV	" x "
-512	73 PIV, 74-76 IV	" x "
-513	73 PIII, 74 III	Hark x "
-520	73 PIII, 74 III	" x "

A72-522	73 PIII, 74 II	Hark x Wayne
-523	73 PIII, 74 II	" x "
-525	73 PIII, 74 III	" x "
A73-106	74 PI	* " x [Provar x (Disoy x Magna)]
-109	74 PI	* Amsoy x " " "
-128	= Coles (1976)	* Hark x " " "
-137	74 PI	* " x " " "
-139	74 PI	* " x " " "
-221	74 PII	* Amsoy x " " "
-225	74 PII	* " x " " "
-227	= Marion (1976)	* " x " " "
-229	74 PII, 75 II	* " x " " "
-314	74 PIII, 75 III	* " x " " "
-316	74 PIII	* " x " " "
-328	74 PIII	* Hark x " " "
-336	74 PIII	* Amsoy x " " "
-10079	74 PIII	Williams x Wirth
-11004	74 PI	SL12 x Anoka
-12013	74 PIII, 75 III	L66L-144 x Dunn
-13001	74 PIV	C1483 x Rampage
-13078	74 PII	M62-263 x Amsoy 71
-14028	74 PII	M62-275 x Beeson
-15028	74 PI	M63-17 x C1453
-15055	74 PIV	Beeson x L66-1359
-15059	74 PIII	" x "
-15089	74 PIV	" x "
-17060	74 PIV	L66L-137 x Calland
-18036	74 PIV	Woodworth x "
-18084	74 PI	Pike x Dunn
-19009	74 PI	" x Beeson
-19068	74 PI, 75-76 I	" x Wells
-19084	74 PI, 75-76 I	" x "
-20048	74 PI	" x L66L-144
-20059	74 PI, 75-76 I	" x "
-21030	74 PI	L65-1342 x IVR 4311
-22015	74 PIII	M62-263 x IVR Ex4426
-22031	74 PI	" x " "
-22032	74 PI	" x " "
-22039	74 PII	" x " "
-22051	74 PII, 75 II	Corsoy x " "
-22056	74 PI	" x " "
-22065	74 PII	" x " "
-23066	74 PIII, 75 III	IVR Ex4428 x Md66-1258
-23088	74 PIV	" " x "
-23093	74 PIII	" " x "
-24033	74 PII	IVR Ex212 x Swift
-24036	74 PII	" " x "
-25003	74 PIV	" " x Cutler 71
-25042	74 PII	" " x " "
-25043	74 PIV	" " x " "

A73-25050	= Sloan (1978)	M59-120 x IVR 4731
-25084	74 PIII	" x " "
-25088	74 PII, 75 II	" x " "
-26024	74 PIV	IVR 4731 x Wirth
A73D2	74 PII	Hark x Provar
D7	74 PI	" x "
D8	76 PI	" x "
D13	74 PII	" x Wayne
D16	74 PI	" x "
D16-2	79 PI	" x "
-3	79 PII	" x "
D22	76 PI	Amsoy x L61-344
D24	76 PI	" x "
D28	76 PI	" x "
D2876	79 PI	" x "
A74-101010(=A2)	75 PI, 76-77 I	M63-17 x C1453
-101014	75 PI	Woodworth x Calland
-101035(=A3)	75 PI, 76-77 I	C1426 x AP68-315
-102011	75 PI, 76-77 I	M62-263 x IVR Ex4426
-102012	75 PI	" x "
-102015	75 PI	Swift x Wye
-102020	75 PI	M62-275 x L66L-144
-102021	75 PI	L65-1342 x IVR 4311
-102027	75 PI	Pike x Dunn
-102037	75 PI, 76 I	Wells x Wye
-103017	75 PI	M60-92 x IVR Ex4428
-104026	75 PI	Pike x Wells
-104030	75 PI, 76 II	" x "
-104034	75 PI, 76 II	" x Beeson
-105021	75 PI, 76 I	L66L-137 x Calland
-201006	75 PI, 76 I	Amsoy x [Provar x (Disoy x Magna)]
-201010	= Vinton (1978)	Hark x " x " x "
-201026	75 PII	" x " x " x "
-202001	75 PII	Corsoy x IVR Ex4426
-202019	75 PII, 76 II	Beeson x L66-1359
-202036	75 PII	Bonus x Swift
-203001	75 PII	Corsoy x Williams
-203002	75 PII, 76 II	M59-120 x IVR 4731
-203006	75 PII	IVR Ex212 x M62-177
-203012	75 PII	Corsoy x IVR Ex4426
-204001	75 PIII	" x "
-204012	75 PII	M62-275 x L66L-144
-204023	75 PII	M60-92 x Wye
-204026	75 PIII	IVR Ex4428 x Md66-1258
-204028	75 PIII, 76-77 III	Corsoy x Williams
-204030	75 PIII	Bonus x M59-120
-204033	75 PII, 76 II	Beeson x L66-1359
-204034	75 PII, 76 II	M62-263 x Amsoy 71(CX407BC7-326)
-205037	75 PII	SL12 x Anoka
-302008	75 PIII	Swift x L66L-137

A74-302012	= Pella (1979)	L66L-137 x Calland
-302029	75 PIV	Corsoy x Cutler 71
-302030	75 PIII, 76 III	M62-263 x IVR Ex4426
-303009	75 PIV	Md62-3223 x M62-177
-303012	= Cumberland (1978)	Corsoy x Williams
-303013	= Oakland (1978)	L66L-137 x Calland
-303023	75 PIV	M59-120 x L66L-137
-303027	75 PIV	Corsoy x Williams
-303033	75 PIV	Evans x "
-304001	75 PIV	Swift x Wye
-304009	75 PIII, 76 III	Pike x L66L-144
-304010	75 PIV	IVR Ex4428 x Md66-1258
-304023	75 PIV	" " x "
-304031	75 PIV, 76 IV	Wells x Wye
-305014	75 PIII	M59-120 x IVR 4731
-305021	75 PIV	AP68-315 x C1453
-306002	75 PIII, 76 III	Evans x Williams
-306003	75 PIV	M63-17 x C1453
-306008	75 PIV, 76-77 III	M62-275 x L66L-144
A75-101014	76 PI, 77 I	Pike x Wells(2)
-101022	76 PI, 77 I	" x " "
-102004	76 PI	" x " "
-102032	= Weber (1979)	<b>*C1453 x Swift</b>
-103008	76 PI	M63-17 x C1453
-103016	76 PI, 77 I	Pike x Wells(2)
-103019	76 PI, 77-78 I	AP6
-103028	76 PI	M63-17 x C1453
-104021	76 PI	M62-263 x Amsoy 71(CX407BC7-326)
-104031	76 PII	Pike x Wells(2)
-105007	76 PI	" x Wells
-105019	76 PI, 77 II	*Corsoy(2) x (L65-1342 x Mack, or Anoka x Mack)
-105020	76 PII, 77 II	* " " x " " x " " " x "
-105021	76 PI, 77 II	* " " x " " x " " " x "
-105029	76 PII, 77 II	* " " x " " x " " " x "
-105033	76 PII, 77 II	* " " x " " x " " " x "
-105034	76 PI, 77 II	* " " x " " x " " " x "
-128008	76 PI	AP6
-128027	76 PII	"
-138035	76 PII	"
-201033	76 PII	Pike x Wells
-203005	76 PII	L65-1342 x C1488
-203011	76 PII	L67-1250 x Calland
-203014	76 PII, 77 II	IVR 4731 x Wirth
-203032	76 PII	IVR Ex212 x C1453
-203036	76 PII, 77 II	IVR Ex4428 x Woodworth
-204018	76 PIII, 77 III	IVR Ex4731 x Wirth
-204034	76 PII	M59-120 x IVR 4731
-204035	76 PII	M62-275 x IVR Ex4428
-205006	76 PII	Corsoy x IVR Ex4426
-302002	76 PIV	AP68-1216 x Calland

A75-302003	76 PIV, 77 IV	L15 x AP68-1016
-302005	= BSR 301 (1979)	" x "
-302017	76 PIV, 77 IV	Woodworth x Calland
-302019	76 PIV	AP68-1016 x "
-305005	76 PIII	AP6
-305010	76 PIV, 77 III	"
-305017	76 PIV	"
-305022	76 PIII, 77-79 III	Wye x IVR 4731
-305023	76 PIII	Corsoy x IVR 4731
-305031	76 PIII, 77 III	" x Williams
-306005	76 PIV, 77 III	Pike x SL12
-306007	76 PIII	Wells x Wye
-306015	76 PIII	AP6
-306018	76 PIII	"
-306019	76 PIII	"
-306033	76 PIV	Hark x Cutler 71
-332002	76 PIV	AP6
-332007	76 PIII	"
-332027	76 PIII	"
-332035(=A4)	76 PIII, 77 III	L15 x AP68-1016
A75D15	80 PII	Amsoy x L61-344
D29	80 PII, 81 I	Hark x "
D44	80 PII	" x "
A76-101003	77 PI	" x Pike
-101004	77 PI	" x "
-101008	77 PI	AP6
-101013	77 PI	"
-101018	77 PI	"
-101019	77 PI, 78 I	"
-101024	77 PI, 78 I	"
-101035	77 PI	"
-102009	= Hardin (1980)	Corsoy(3) x Cutler 71
-102013	77 PI, 78 I	AP6
-102020	77 PI	M59-120 x Pike
-102022	77 PI	*Corsoy(2) x (L65-1342 x Mack, or Anoka x Mack)
-103002	77 PI, 78-79 I	AP6
-103003	77 PI, 78 I	"
-103007	77 PI	"
-105027	77 PII	*Corsoy(2) x (L65-1342 x Mack, or Anoka x Mack)
-201002	77 PII	AP6
-201004	77 PII	"
-201009	77 PII, 78 II	"
-201010	77 PII, 78 II	"
-201012	77 PII	"
-201016	77 PII	"
-202015	77 PII, 78 II	"
-203016	77 PII	"
-302010	77 PIII	AP68-1216 x L15
-302014	77 PIII	AP6
-303035	77 PIII, 78 III	M60-92 x IVR Ex4428

A76-304002	77 PII, 78 III	AP6
-304005	77 PII	"
-304006	77 PII	"
-304008	77 PII	"
-304009	77 PII	"
-304012	77 PII	"
-304013	77 PII	"
-304019	= BSR 302 (1980)	(Beeson x AP68-1016) x (L15 x Calland)
-304020	77 PIII, 78 III	(Beeson x AP68-1016) x (L15 x Calland)
-304022	77 PIV	AP6
-304030	77 PIII	"
-304034	77 PIV	"
-304035	77 PIV	"
-305002	77 PIII	AP68-1216 x Calland
-305004	77 PIV	AP6
-305006	77 PIV	"
-305007	77 PIV	"
-305016	77 PIII	"
A77-111019	78 PI	Washington x A72-512
-112008	78 PI, 79 I	" x "
-112016	78 PI	AP6E(S1)C1
-112023	= Lakota (1981)	AP6M(S1)C1
-112028	78 PI	AP6(1YT)(F4)C1
-112029	78 PI	"
-112030	78 PI	"
-113018	78 PI	AP6E(S1)(C1)
-114015	78 PI	Washington x Steele
-114020	78 PI	AP6E(S1)C1
-114030	78 PI	A72-106 x Williams
-114033	78 PI	AP6(1YT)(F4)C1
-116012	78 PII	AX990(AX930 x AX965)
-116013	78 PI	" " x "
-116028	78 PI	M62-275 x Beeson
-211021	78 PII, 79-80 II	Beeson x A72-507
-212006	78 PII, 79 II	Hodgson x M65-69
-212008	78 PII	" x A72-511
-214005	78 PII	AP6M(S1)C1
-214015	78 PII	"
-214019	78 PII	A73-25088 x Woodworth
-214022	78 PII, 79 III	L70T-543 x Harcor
-214035	78 PII, 79 III	AP6
-215009	78 PII	L69D-133 x C1515
-215030	78 PII	AP6(1YT)(F4)(C1)
-216006	78 PII	AX1390
-305025	78 PIV	AP6
-311031	78 PIII, 79 III	"
-312017	78 PII	Coles x A72-507
-313012	78 PIII	AP6(1YT)(F4)C1
-313032	78 PIII	AP6
-314013	78 PIII, 79 III	A73-21030 x Williams

A77-314014	78 PIV, 79 IV	Coles x A72-507
-314017	78 PIII, 79 III	" x "
-315011	78 PIV	L69D-133 x C1515
-315012	78 PIII	L70T-543 x A73-25088
-315023	78 PIV	A72-512 x Amsoy 71
-315024	78 PIII, 79 III	" x Agripro 35
-316004	78 PIV	AX990
-316013	78 PIV	AX1390
A78-21007	79 PI	A73-19084 x Pride B216
-121014	79 PI, 80-81 I	Pride B216 x Hodgson
-122008	79 PI	" " x M68-49
-122028	79 PII, 80 II	Hodgson x Sloan
-122030	79 PI	" x L70T-543
-122031	79 PI, 80 II	SRF 350 x Pride B216
-123002	79 PI, 80 II	C1520 x Coles
-123005	79 PI	A73-19084 x A72-512
-123009	79 PI	Agripro 25 x Pride B216
-123018	79 PI, 80-82 I	Pride B216 x Hodgson
-124004	79 PI	" " x L66-1359
-124018	79 PI	" " x M65-442
-124020	79 PI	A73-19084 x Pride B216
-124023	79 PI	AP6(1YT)(S3)C1
-125008	79 PI	Pride B216 x AX901-40-2
-125029	79 PI, 80-81 II	" " x AX900-4-3
-223022	79 PII	AP6(1YT)(S3)C1
-225002	79 PII	C1515 x Coles
-227012	79 PII, 80 III	Pride B216 x AX901-40-2
-227013	= BSR 201 (1982)	" " x "
-227015	79 PII, 80-81 II	" " x "
-227016	79 PII, 80-81 II	" " x "
-268022	83 PIIIA	A77-314013 x A77-316022
-321009	79 PII	Williams x Sloan
-321011	79 PII, 80 III	Pride B216 x Agripro 25
-322024	79 PIIIA, 80 III	Williams x Sloan
-323011	79 PIII	Coles x Agripro 27
-323019	79 PIII	A72-512 x Northrup King S1346
-323031	79 PIII	Sloan x C1520
-324002	79 PIIIA, 80 III	A72-512 x Pride B216
-325028	79 PIV, 80 III	" x Williams
-325031	79 PIV	AP6(1YT)(S3)C1
-325033	79 PIII	"
-326024	79 PIV	Pride B216 x AX896-67-3
-326026	79 PIII	" " x "
-326032	79 PIIIA, 80 III	AX1390
A79-131010	80 PI	L69U40-19-1 x (AP68-1016(2) x C1426)
-133019	= Elgin (1984)	AP6(2YT)(F4)C1
-134008	80 PI, 81-82 I	AP6(1YT)(F4)C2
-134018	80 PI	Pella x A73-19084
-134026	80 PI	Pride B216 x Land O Lakes Max
-134034	80 PI	C1520 x L69U40-19-1

A79-135010	80 PI, 81-83 I	Pride B216 x Cumberland
-135012	80 PI	" " x Land O Lakes Max
-136010	80 PI	Oakland x L69U40-19-1
-136012	80 PI, 81 I	Pride B216 x Land O Lakes Max
-136030	80 PI	AP6(1YT)(F4)C2
-138014	80 PI, 81 II	Northrup King S1492 x Asgrow A3300
-138015	80 PI	" " " x " "
-138024	80 PI, 81-82 II	A74-102011 x C1523
-138035	80 PII	Pride B216 x Cumberland
-231010	81 PIII A	AX900-4-3 x [(Harosoy x Norchief) x Beeson)]
-232005	80 PII, 81 III	AP6TW(2YTC)(F4)C1
-232026	80 PII, 81 III	"
-232027	80 PII	"
-235002	80 PII	Pride B216 x Cumberland
-236002	80 PII, 81-82 III	" " x "
-236003	80 PII, 81 II	" " x "
-237005	80 PIII	" " x "
-237014	80 PII	C1523 x Pride B216
-237034	80 PII	" x " "
-238034	80 PII, 81 III	M68-48 x " "
-287041	80 PI	AP6(1YT)(F4)C2
-331020	80 PIV	(L15 x AP68-1016) x Cumberland
-331022	80 PIII	" " x Oakland
-334010	80 PIII, 81 III	Pride B216 x Land O Lakes Max
-335034	80 PIV	A72-512 x Pride B216
-336007	80 PIV	Northrup King S1492 x A72-512
-336014	= Harper (1984)	*unknown
-337010	80 PIII	Pride B216 x Land O Lakes Max
-337020	80 PIV	A72-512 x A74-204034
-338015	80 PIII	Pella x Oakland
-338021	80 PIII	A72-512 x A74-104030
A80-143008	81 0	(Corsoy x Wayne) x A4
-143015	81 PI	A75-204018 x Weber
-143019	81 PI	(Corsoy x Wayne) x Asgrow A1564
-144004	81 PI, 82 I	Northrup King S1492 x A75-204018
-144006	81 PI	(Corsoy x Wayne) x L69U40-16-4
-144007	81 PI	" " x A4
-144018	81 PI	Asgrow A1564 x Century
-144024	81 PI, 82 I	Weber x L69U40-16-4
-144029	81 PI	A75-204018 x A75-101022
-145015	81 PI	(Corsoy x Wayne) x Peterson 118-11
-146003	81 PI	A75-203036 x Union
-146004	81 PI	(Corsoy x Wayne) x A75-306005
-146008	81 PI	Asgrow A1564 x Century
-146032	81 PI	A75-204018 x Weber
-147002	81 PIIA, 82-83 II	Northrup King S1492 x Pella
-147003	81 PI, 82 II	" " " x "
-147005	81 PI, 82 II	" " " x A75-204018
-149020	= BSR 101 (1985)	L69U40-16-4 x A76-304020
-244003	81 PIIA, 82-83 II	Northrup King S1492 x Pella

A80-244014	81 PIIA	A75-204018 x Weber
-244031	81 PIIA	(Corsoy x Wayne) x L69U40-16-4
-244035	81 PIIA	" " x Pella
-244036	81 PIIA, 82-83 II	A74-204034 x Cumberland
-245022	81 PIIA, 82 III	Northrup King S1492 x Weber
-245023	81 PIIA	A4 x Weber
-245032	81 PIIA	A75-203036 x A75-204018
-247003	81 PIIA	(Corsoy x Wayne) x A75-204018
-247007	81 PIIA, 82 III	A75-204018 x Weber
-247008	81 PIIA, 82 III	" x Asgrow A2440
-249016	81 PIIA	L69U40-16-4 x A76-304020
-249032	81 PIIA	A4 x A75-204018
-250034	81 PIIA	A75-204018 x Pella
-344003(=A8)	81,84 PIIIA,82-84 III*	<u>A4</u> x Century
-344006	81 PIIIA	(Corsoy x Wayne) x Pella
-344007	81 PIIIA	" " x "
-344014	81 PIIIA	Union x A75-204018
-345005	81 PIIIA, 82 III	Northrup King S1492 x Pella
-346005	81 PIIIA	(Corsoy x Wayne) x Pella
-346013	81 PIIIA	Union x Pella
-346024	81 PIIIA	A4 x Pella
-346026	81 PIIIA	" x "
-346029	81 PIIIA, 82-83 III	A75-204018 x BSR 301
-346031	81 PIIIA	" x " "
-347008	81 PIV	(Corsoy x Wayne) x A75-204018
-347013	81 PIIIA	Union x (Corsoy x Wayne)
-347019	81 PIIIB	" x A75-204018
-347026	81 PIV	A75-203036 x (Corsoy x Wayne)
-349012	81 PIV, 82 IV	L69U40-16-4 x A76-304020
-350008	81 PIIIB	AP6(2YTS)(S3)C1
A81-151008	82 PI	Land O Lakes Max x Asgrow A2656
-151026	82 PI, 83-84 I	A75-204018 x Century
-152006	82 PI, 83 I	A76-304020 x Asgrow A2656
-152008	82 PI	Century x A76-304020
-152012	82 PI	Hardin x A76-202015
-153001	82 PI	A76-202015 x Schechinger S48
-153003	82 PIIA, 83-84 II	* " - x Century
-153035	82 PI	" x Schechinger S48
-154001	82 PI	Land O Lakes Max x A75-103019
-154010	82 PI	A76-304020 x "
-155001	82 PI, 83 II	A76-202015 x Schechinger S48
-155006	82 PIIA	Schechinger S48 x A76-304020
-155014	82 PIIA, 83-84 II	*A76-202015 x "
-155022	82 PIIA	*A75-204018 x Weber
-156014	82 PI	A77-116013 x Land O Lakes Max
-156027	82 PIIA, 83 II	*A76-202015 x A76-304020
-156031	82 PIIA	AP6(1YT)(F4)C3
-157001	82 PIIA, 83 II	Pride B216(2) x A2
-157003	82 PIIA	" " " x "
-157004	82 PIIA	" " " x "

A81-157005	82 PIIA, 83 II	Pride B216(2) x A2
-157006	82 PI	" " " x "
-157007	82-83 II	" " " x "
-157008	82 PIIA	" " " x "
-157011	82 PI	" " " x "
-157024	82-83 I	" " " x "
-157013	82 PIIIB, 83 III	Land O Lakes Max x BSR 302
-257014	82 PIIA	" " " " x " "
-257017	82 PIIA	A77-116013 x Land O Lakes Max
-257025	82 PIIIB	Northrup King S1492 x A75-204018
-257031	= Preston (1985)	Schechinger S48 x Land O Lakes Max
-351016	82 PIIA	Asgrow A2656 x Schechinger S48
-352008	82 PIIIB	A76-202015 x Century
-353004	82 PIIIB	Century x A76-304020
-353005	82 PIIIB	" x "
-354007	82 PIIIB	A76-304020 x Asgrow A2656
-354009	82 PIIIB	Century x A76-304020
-354015	82 PIIIB	A76-304020 x A75-103019
-354017	82 PIIIB	" x "
-354025	82 PIIIB, 83 III	Schechinger S48 x Land O Lakes Max
-355003	82 PIIIB	A76-202015 x Land O Lakes Max
-355005	82 PIIIB	Century x A76-304020
-355012	82 PIIIB, 83 IV	A76-304020 x Land O Lakes Max
-355020	82 PIIIB	Century x Land O Lakes Max
-356022	82 PIIIB, 83 IV	Century x A76-304020
A82-161015	83 PI	A77-211021 x NAPB HP 20-20
-161024	83 PI	A77-314013 x Pride B216
-161034	83 PI, 84-85 I	A76-103002 x A77-211021
-161035 *	83 PIIA, 84 II	Pride B216 x "
-162023	83 PI, 84 II	Northrup King S1492 x Tri-Valley Charger
-162025	83 PI	Pride B216 x Pella
-162033	83 PI, 84 I	A77-211021 x Tri-Valley Charger
-163026	83 PI	Pride B216 x Pella
-164003	83 PI, 84 I	Pride B216(2) x A2
-165004	83 PI	A2 x Hy Vigor Rowtunda
-165012	83 PI	Century x A76-304020
-166001	83 PI	AP6E(2YT)(F4)C2
-166011	83 PI	"
-167014	83 PI, 84 I	AP6TW(2YT)(F4)C2
-167026	83 PI	"
-168005	83 PI	Northrup King S1492 x A78-125026
-168030	83 PIIA	Asgrow A3585 x A76-103002
-263007	83 PIIA	A76-202015 x Century
-263010	83 PIIA, 84 II	A77-211021 x Pella
-263027	83 PIIA	Pride B216 x A77-211021
-263034	83 PIIA, 84 II	" " x "
-264001	83 PIIA	A77-211021 x Pella
-264003	83 PIIA	NAPB HP 20-20 x A77-314013
-264013	83 PIIA	Schechinger S48 x Century
-264014	83 PIIA	A77-211021 x Northrup King S1492

A82-264016	83 PIIA, 84 II	Asgrow A3585 x Tri-Valley Charger
-264021	83 PIIA	Pride B216 x Pella
-266026	83 PIIA	AP6M(2YT)(F4)C2
-267015	83 PIIA, 84-85 II	AP6TW(2YT)(F4)C2
-268013	83 PIIA	Pella x A78-326017
-361011	83 PIIIA, 84 III	Asgrow A3585 x NAPB HP20-20
-363006	83 PIIIA	Pella x Asgrow A3585
-363015	83 PIIIA	Northrup King S1492 x Northrup King S4055
-363031	83 PIIIA	A76-202015 x A76-304020
-363032	83 PIIIA, 84 III	" x Century
-364015	83 PIIIA	Pella x A77-314013
-365009	83 PIIIA	Northrup King S4055 x Pella
-365023	83 PIIIA	A77-314013 x Tri-Valley Charger
-365028	83 PIIIA, 84-85 III	Asgrow A3585 x " "
-367021	83 PIIIA	AP6TW(2YT)(F4)C2
-368007	83 PIIIA	Asgrow A3585 x A77-116023
-368011	83 PIIIA	Pella x A78-326017
-368028	83 PIIIA	A77-314013 x Northrup King S1492
-368033	83 PIIIA	NK S4055 x A77-211021
A83-171001	84 PI	Agripro AP200 x Hardin
-171015	84 PI, 85 I	A78-122031 x Tri-Valley Charger
-172001	84 PI	Agripro AP200 x Hardin
-172005	84 PI	NAPB HS235 x Merschman Washington V
-172007	84 PI, 85 I, 86 II	A77-211021 x " " "
-172017	84 PI	NK S1492 x NAPB HS235
-172030	84 PI, 85 I	Agripro AP200 x NK S1492
-173019	84 PI	A78-122031 x Asgrow A3127
-174010	84 PI	A77-211021 x NAPB HS235
-174011	84 PI	Northrup King S1492 x NAPB HS235
-174017	84 PI	Tri-Valley Charger x " "
-174020	84 PI, 85 I	Northrup King S1492 x A78-122031
-174023	84 PI	" " " x "
-176004	84 PI	BSR 201 x Northrup King S1492
-176017	84 PIIA	NAPB HS235 x A78-125029
-176025	84 PI	BSR 201 x NAPB HS235
-176036	84 PIIA	Pride B216 x Pella
-271010	84 PIIA, 85 II	Northrup King S1492 x Merschman Washington V
-271018	84 PIIA	A77-211021 x Northrup King S1492
-271022	84 PIIA	A78-122031 x A77-211021
-271026	84 PIIA	" x "
-271027	84 PIIA, 85 II	Northrup King S1492 x Asgrow A3127
-272020	84 PIIA, 85 II	Agripro AP200 x NAPB HS235
-273009	= Conrad (1988)	Asgrow A3127 x Tri-Valley Charger
-273017	84 PIIA	Agripro AP200 x NAPB HS235
-273021	84 PIIA	A77-211021 x Agripro AP200
-274011	84 PIIA, 85 III	Asgrow A3127 x Tri-Valley Charger
-276034	84 PIIA	A76-202015 x Century
-276035	84 PIIA	A77-211021 x Pella
-371005	84 PIIIA	Agripro AP200 x NAPB HS235

A83-371011	84 PIIIA	Northrup King S1492 x Asgrow A3127
-371012	84 PIIIA	A78-122031 x Agripro AP200
-371017	84 PIIIA	A77-211021 x Cumberland
-371028	84 PIIIA	Asgrow A3127 x Agripro AP200
-372027	84 PIIIA, 85-86 III	Merschman Washington V x Asgrow A3127
-372028	84 PIIA	Agripro AP200 x Northrup King S1492
-373001	84 PIIIA	A78-122031 x Merschman Washington V
-373003	84 PIIIA	NAPB HS235 x " " "
-373006	84 PIIIA	A78-122031 x Agripro AP200
-373012	84 PIIIA	A77-211021 x Merschman Washington V
-373021	84 PIIIA	Asgrow A3127 x Cumberland
-374002	84 PIIIA	Agripro AP200 x "
-374011	84 PIIIA	Northrup King S1492 x Merschman Washington V
-374012	84 PIIIA	Northrup King S1492 x Merschman Washington V
-374033	84 PIIIA	AP6LTW(2YT)(F4)C2
A84-181009	85 PI	HW79015 x A78-123018
-181018	85 PI	A79-134008 x Lakota
-182007	85 PI	A78-123018 x A79-138024
-182018	85 PI	" x A79-334010
-182025	85 PI	A79-134008 x NAPB Ex9649
-182026	85 PI	" x Agripro AP225C
-183008	85 PI	A78-123018 x A80-247007
-183020	85 PI	" x A79-334010
-183021	85 PI	" x "
-183027	85 PI	A79-134008 x NAPB Ex9649
-183034	85 PI	x Lakota
-184018	85 PI	Weber x Lakota
-184021	85 PI	A79-134008 x Land O Lakes L4404
-184023	85 PI	* " x NAPB Ex9649
-185032	85 PI	A77-211021 x NAPB HS235
-281015	85 PIIA	HW79015 x A80-247007
-282009	85 PIIA	" x A79-334010
-282011	85 PIIA	A80-247007 x Migro HP20-20
-282019	85 PIIA, 86 III	Harper x Asgrow A3127
-282036	85 PIIA	A80-247007 x Harper
-283002	85 PIIA	" x "
-283009	85 PIIA	HW79015 x A78-123018
-283016	85 PIIA	Asgrow A3127 x A79-334010
-283034	85 PIIA	Asgrow A1937 x HW79015
-284001	85 PIIA	" " x A79-334010
-284005	85 PIIA	A80-247007 x Asgrow A3127
-284007	85 PIIA	HW79015 x A78-123018
-284008	85 PIIA	" x "
-284023	85 PIIA	Harper x Asgrow A3127
-284033	85 PIIA, 86-87 II, 87 III	HW79015 x A80-247007
-381009	85 PIIIA	A80-247007 x Harper
-381014	85 PIIIA	A79-334010 x A80-247007
-381021	85 PIIIA	A80-247007 x Asgrow A1937

A84-381026	85 PIIIA	Asgrow A3127 x A78-123018
-381030	85 PIIIA	HW79015 x A80-247007
-382002	85 PIIIA	A79-138024 x Harper
-382009	85 PIIIA	A80-247007 x Asgrow A3127
-382010	85 PIIIA	" " x "
-382015	85 PIIIA	Harper x HW79015
-382028	85 PIIIA	A79-334010 x Harper
-383005	85 PIIIA	Asgrow A1937 x A79-334010
-383015	85 PIIIA	Harper x Asgrow A1937
-383018	85 PIIIA	A80-247007 x Harper
-383019	85 PIIIA	Migro HP2530 x Asgrow A3127
-384017	85 PIIIA	Harper x Asgrow A1937
A85-191029	86 PI	A80-245022 x A8
-191030	86 PI	Pride B203 x Asgrow A1937
-191033	86 PI	" " x A79-135010
-192028	86 PI	" " x Midwest Oilseeds 3010
-192034	86 PI, 87-88 I	A8 x Asgrow A1937
-193012	86 PI	A80-247007 x A80-143015
-193020	86 PI, 87 II	Asgrow A1937 x Tri-Valley Charger III
-193023	= Marcus (1989)	A79-135010 x Asgrow A1937
-193026	86 PIIB	Elgin x Midwest Oilseeds 2050
-193033	86 PI	Pride B203 x A81-157024
-194007	86 PI	Hofler Censoy x A80-143015
-194010	86 PI	" " x "
-194012	86 PI	MRC Cheyenne x "
-195005	86 PI, 87 II	A80-149008 x Midwest Oilseeds 2050
-195013	86 PI	A79-334010 x A79-131010
-291001	= Kenwood (1989)	Elgin x Asgrow A1937
-291010	86 PI, 87 II	Midwest Oilseeds 3010 x Asgrow A1937
-291024	86 PIIB	Pride B203 x Midwest Oilseeds 3010
-292023	86 PIIB	Midwest Oilseeds 3010 x A80-245023
-292033	86 PIIB	A79-135010 x Asgrow A1937
-293005	86 PIIB	A79-331028 x Asgrow A3127
-293030	86 PIIB, 87 III	Midwest Oilseeds 3010 x A8
-293032	86 PIIB, 87 II	A8 x Elgin
-293033	86 PIIB	Pride B203 x Midwest Oilseeds 2050
-294054	86 PIIB	A79-334010 x A80-247007
-295053	86 PIIB	A80-245022 x Elgin
-296052	86 PIIB	Pride B203 x Midwest Oilseeds 3010
-298051	86 PIIB, 87 III	Midwest Oilseeds 3010 x A80-245022
-298054	86 PIIB	Pride B203 x Midwest Oilseeds 3010
-298055	86 PIIB	HW79015 x A78-123018
-391035	86 PIIIA	Harper x Asgrow A1937
-392010	86 PIIIA	A8 x Elgin
-392011	86 PIIIA	" x "
-392015	86 PIIIA	Pride B203 x A8
-392026	86 PIIIA, 87 III	A8 x Midwest Oilseeds 2050
-392028	86 PIIIA	" x Asgrow A1937
-392035	86 PIIIA	*A80-245022 x Asgrow A1937
-393001	86 PIIIA, 87 III	Midwest Oilseeds 3010 x A80-245022

A85-393025	86 PIIIA	Tri-Valley Charger III x Elgin
-393027	86 PIIIA	A81-157024 x A8
-393036	86 PIIIA	A8 x Midwest Oilseeds 2050
-394003	86 PIIIA	Midwest Oilseeds 3010 x A80-149008
-394009	86 PIIIA, 87 III	A79-331022 x A79-334010
-394010	86 PIIIA	Asgrow A1937 x A79-331022
-394022	86 PIIIA	A79-331022 x A79-334010
A85D5	87 PI	Elf x Agripro 1120
D24	87 PIIA	Elf x A73D16
A86-101009	87 PI, 88 I	Hack x Asgrow A1937
-101013	87 PI	A80-244036 x Tri-Valley Charger
-101025	87 PI	" x Asgrow A1937
-101030	87 PI	Hack x Midwest Oilseeds 2050
-101034	87 PI	Hack x Tri-Valley Charger
-102003	87 PI	A80-244036 x Asgrow A1937
-102004	87 PI, 88 II	" x "
-103002	87 PI, 88-89 II	Jacques J103 x A81-356022
-103013	87 PI	Stine 3200 x NK S1346
-103017	87 PIIA	A80-244036 x Midwest Oilseeds 2050
-103024	87 PI	" x Hack
-103027	87 PI, 88 II	Hack x Asgrow A1937
-104002	87 PI	A81-156017 x Asgrow A1937
-104007	87 PI	A81-356022 x A80-349006
-104011	87 PI, 88 II	A80-244036 x A8
-104021	87 PIIA	Zane x Stine 3200
-105009	87 PI	L78-1491 x Hardin
-105011	87 PIIA	L80-4349 x Tri-Valley Charger
-201030	87 PIIA	A80-244036 x Midwest Oilseeds 2050
-202022	87 PIIA	Midwest Oilseeds 2050 x Stine 3200
-202026	87 PIIA	A80-244036 x Midwest Oilseeds 2050
-202027	87 PIIA	" x " "
-202031	87 PIIA	Midwest Oilseeds 2050 x NK S1346
-203004	87 PIIA, 88 II	Hack x Zane
-203006	87 PIIIA	Zane x Stine 3200
-203034	87 PIIA, 88-89 II, 89 III	A81-356022 x Zane
-204013	87 PIIA	A80-244036 x A8
-204022	87 PIIA, 88-89 II, 89 III	Hack x Zane
-204030	87 PIIA	Tri-Valley Charger x A81-356022
-205020	87 PIIIA	*L80-4349 x Tri-Valley Charger
-205029	87 PIIIA	L79-3910 x Stine 3200
-205035	87 PIIA	Tri-Valley Charger x A81-356022
-301003	87 PIIIA	A80-244036 x Hack
-301006	87 PIIIA	Asgrow A1937 x Midwest Oilseeds 2050
-301024	87 PIIIA, 88-89 III	A81-356022 x Hack
-302015	87 PIIIA	" x Zane
-302016	87 PIIIA	Asgrow A1937 x Jacques J103
-303014	87 PIIIA, 88-89 III	A81-356022 x Hack
-304001	87 PIIIA	A81-156013 x Northrup King S1346
-304004	87 PIIIA	A80-244036 x A8
-304023	87 PIIIA	A81-356022 x Zane

A86-304035	87 PIIIA	A81-356022 x Hack
-305018	87 PIIIA	L80-4349 x Tri-Valley Charger
A86D5	87 PIIA	Elf x A75D11
D6	87 PIIA	" x "
A87-187006	88 PI	BSR 101 x A81-151026
-187007	88 PI, 89 II	" " x "
-187020	88 PI, 89 II	Jacques J103 x A81-151026
-187026	88 PI	A82-106088 x A81-157007
-195024	89 I	A81-157024 x CN290
-195032	= Newton (1990)	BSR 101 x CN210
-195034(A20)	89 I	" " x "
-196014	= IA 2008 (1991)	* " " x A80- <u>244003</u>
-196025	88 PI	A80-244036 x Asgrow A1937
-196029	88 PI	AP6TW2YTF4C3
-196030	88 PI	"
-197001	88 PIIA	A80-244003 x Harper
-197018	88 PIIA	Pride B152 x A80-244003
-198005	88 PI, 89 I	A80-244003 x Harper
-198013	88 PIIA	" x Asgrow A3659
-198015	88 PI, 89 II	Hack x A81-157024
-199024	88 PIIA	A80-244003 x Hack
-295015	88 PIIA	Jacques J103 x BSR 101
-296004	88 PIIIA	A8 x Asgrow A3659
-296011	88 PIIA, 89-90 III	Harper x A80-346029
-296012	88 PIIA, 89 III	" x "
-296013	88 PIIIA	Harper x A80-346029
-296031	88 PIIIA	" x HW 8234
-296035	88 PIIA	A81-257010 x Jacques J103
-297015	= IA 2007 (1991)	Pride B152 x A80-244003
-299028	88 PIIIA	Harper x A81-157024
-395012	89 III	Fayette x Asgrow A3659
-395027	88 PIIIA	A80-244003 x Asgrow A3659
-395028	88 PIIIA	HW8234 x A80-244003
-396020	88 PIIIA, 89 III	Harper x A80-346029
-396023	88 PIIIA	" x "
-398007	88 PIIIA	A80-244003 x Harper
-398025	88 PIIIA	Harper x A81-157024
A87D10	88 PIIB	Elf x A75D11
D16	88 PIIB	" x A73D16
D20	88 PIIB, 89 II	" x "
A88-121004	89 PI	BSR 101 x A81-151026
-121015	89 PI	A82-267015 x Harper
-121016	89 PI	Harper x Profiseed 1138
-121017	89 PI	BSR 101 x Harper
-121019	89 PI, 90 II	A82-267015 x Sherman
-121025	89 PI, 90 II	A8 x Profiseed 1138
-121026	89 PI	" x " "
-121027	89 PI	A83-276024 x A82-267015
-221005	89 PIIA, 90 II	A82-267015 x Sherman
-221006	89 PIIIA, 90 II	Riverside 2024 x Harper

A88-221009	89 PIIIA	Sherman x A8
-221011	89 PIIA	LN80-7603 x Sherman
-221013	89 PIIA	LN80-8653 x Harper
-221020	89 PIIA, 90 III	A82-267015 x "
-221021	89 PIIIA	BSR 101 x "
-221022	89 PIIIA	Riverside 2024 x "
-221026	89 PIIA	A82-267015 x Sherman
-221029	89 PIIA	Riverside 2024 x Harper
-321007	89 PIIIA	Sherman x Harper
-321010	89 PIIIA	Riverside 2024 x Sherman
-321012	89 PIIIA	A82-267015 x Harper
-321016	89 PIIIA	" x Sherman
-321019	89 PIIIA	Asgrow A3659 x Pride B152
-321021	89 PIIIA	Sherman x A8
-321022	89 PIIIA	LN80-7603 x Sherman
-321023	89 PIIIA	A83-376026 x Riverside 2024
-321024	89 PIIIA	Sherman x A8
AC89-140002	90 PIIA	AP6E2YT(F4)C4
-140010	90 PIIA	"
-140013	90 PI	"
-140022	90 PI	"
-141012	90 PI	AP6E2YTTW(F4)C4
-141013	90 PI	"
-141024	90 PIIA	"
-141027	90 PIIA	"
-141030	90 PI	"
-145004	90 PI	[A82-161034 x AP9Fe(S1)C6-39-1] x Jacques J231
-145008	90 PI	Pride B152 x A81-151026
-145013	90 PI	BSR 101 x "
-145021	90 PI	BSR 101(2) x A85-144015
-145024	90 PI	" " " x "
-241002	90 PIIA	AP6M2YTTW(F4)C4
-241003	90 PIIA	AP6M2YTTW(F4)C4
-241004	90 PIIA	"
-241029	90 PIIA	"
-340001	90 PIIIA	AP6L2YT(F4)C4
-340020	90 PIIIA	"
-340026	90 PIIIA	"
-340027	90 PIIIA	"
-341004	90 PIIIA	AP6L2YTTW(F4)C4
-341010	90 PIIIA	"
-341019	90 PIIIA	"
-341020	90 PIIIA	"
-341029	90 PIIIA	"
-341030	90 PIIIA	"
AM89-140032	90 PIIA	Jacques J231 x Pride B236
-144003	90 PI	BSR 101 x Asgrow A1937
-144011	90 PI	Jacques J231 x BSR 101
-144019	90 PI	Asgrow A1937 x Jacques J231
-144024	90 PI	Jacques J231 x A8

AM89-144026	90 PII	Jacques J231 x A8
-144029	90 PII	A82-161034 x BSR 101
-144034	90 PII	A85-394009 x Asgrow A1937
-144036	90 PII	A82-161034 x BSR 101
-244003	90 PIIA	Pride B236 x BSR 201
-244007	90 PIIA	Jacques J231 x Pride B236
-244024	90 PIIA	" " x " "
-244028	90 PIIIA	" " x BSR 101
-244029	90 PIIA	" " x A8
-244033	90 PIIA	" " x BSR 101
-244039	90 PIIA	Asgrow A1937 x Jacques J231
-244043	90 PIIA	Pride B236 x Asgrow A1937
-344001	90 PIIIA	" " x BSR 201
-344013	90 PIIIA	Jacques J231 x A8
-344017	90 PIIIA	A85-394009 x Asgrow A1937
-344018	90 PIIIA	" " x " "
-344033	90 PIIA	Pride B236 x " "

Cross-Pedigree Numbers:

AX29-163-1-2	54-56 II
-267-1-1-2	56 PII, 57-58 II
AX50-11-2	60 PIII
B-19	60 PII
F15-1	60 PIII
F27-2	60 PII
F40-2	60 PII, 61-63 II
F58-2	60 PII, 61-62 II
P35-1	60 PII
AX55-22-1	60 PIII, 61 III
-60-3	60 PII, 61 II
F24-2	60 PII, 61 II
P8-2	60 PII, 61 II
P27-1	60 PII
AX56F31-1	60 PII
P64-1	60 PII, 61-63 II
AX57B-14	60 PII
P29-1	60 PII
AX58-1	71 PII
-58-1	60 PIII, 61 III
B-8	60 PII
AX58B-13	60 PII
B-15	60 PII
B-18	60 PII
-C41-1	58 PII
P23-2	60 PII, 61 II
P39-3	60 PII, 61 II
P68-2	60 PII
AX80-21	=Disoy (1967)

Adams x Hawkeye
" x "
Hawkeye x Clark
" x "
" x "
" x " ; see A61-647, -653
" x "
" x "
" x "
" x Harosoy
" x "
" x "
" x "
" x "
Adams x Harosoy
" x " ; see A61-939 = Amsoy
Lincoln x "
" x "
Harosoy x Clark
" x "
" x "
" x "
" x "
" x "
" x "
" x "
" x "
A50-6838[F6 Mandarin (Ottawa) x Kanro] x
A50-7537(F6 Richland x Jogun)

AX84-90	=Magna (1967)	A50-7401[F6 Mandarin (Ottawa) x Jogun] x A50-6838[F6 Mandarin (Ottawa) x Kanro]
-98	=Prize (1967)	same as above
AX143-152-1	67 PII	Lindarin x A54-3159
AX144-16-2	66 PII	" x A54-3202
-69-1	67 PI	" x "
-79-1	67 PII	" x "
-79-2	67 PII	" x "
-203-1	67 PII	" x "
AX144MCD231	67 PII	" x "
AX157-9	62 PI	Chippewa(3) x A56-8221
AX172-29	64 PIII	Ford(3) x PI 232.990
AX209-31-3	70 PII	(D49-2491(4) x Hawkeye)-19-9-1 x F4(Hawkeye x PI 68.708)
AX210-5-2-1	70 PIII	(D49-2491(4) x Hawkeye)-19-9-1 x F4(Ford x PI 68.708)
AX211-1-3	70 PII	(D49-2491(4) x Hawkeye)-19-9-1 x F4(Ford x PI 68.708)
" " "		
AX214-3-1	70 PI	(D49-2491(4) x Hawkeye)-19-7-5 x F4(Ford x PI 68.708)
-3-3	70 PI	(D49-2491(4) x Hawkeye)-19-7-5 x F4(Ford x PI 68-.708)
-13-2	70 PIII	(D49-2491(4) x Hawkeye)-19-7-5 x F4(Ford x PI 68.708)
-13-3	70 PII	(D49-2491(4) x Hawkeye)-19-7-5 x F4(Ford x PI 68.708)
-14-1	70 PIII	(D49-2491(4) x Hawkeye)-19-7-5 x F4(Ford x PI 68.708)
AX224-23	70 PII	Harosoy 63 x PI 248.404
-49	70 PI	" " x "
-88	70 PI	" " x "
AX227-31	71 PII, 72 II	Hawkeye 63 x FC 31.122
AX229-24	70 PI	" " x PI 91.110-1
AX232-33	70 PII	AX56P64-1 x FC 31.122
AX265-5	70 PI	Provar x F1(Harosoy 63 x PI 248.404)
AX268-2	71 PII	" x " (Hawkeye 63 x FC 31.122)
-25	70 PIII	" x " " " "
-70	71 PII	" x " " " "
AX270-26	70 PI	" x " " " x PI 91.110-1)
-32	71 PII	" x " " " x "
AX271-44	71 PII	" x " " " x PI 248.406
AX309-1	70 PII	" x " " " x "
AX899-6-1	75 PIII	Amsoy 71(CX407BC7-326) x AP68-111
ABSR 101BC	= Archer (1990)	* <u>(BSR101(5) x Williams 82,Rpsl-k) x [BSR202(5)</u> <u>x (Harosoy x Altona,Rps6)]</u>
(A75)Corsoy R3	= Vickery (1978)	*Corosy(5) x (L65-1342 x Mack, or Anoka x Mack,Rpsl-c)

Note: For AHW prefix see page 99.

(A)Elgin BC	= Elgin 87 (1987)	Elgin(5) x Williams 82, <u>Rpsl-k</u>
A Hardin BC(k)	= Hardin 91 (1991)	Hardin(5) x Williams 82, <u>Rpsl-k</u>
A Hardin BC(6)	90 I	Hardin(5) x PRX54-33-2(Harosoy x Altona, <u>Rps6</u> )
(A)Harper BC	= Harper 87 (1987)	Harper(6) x Williams 82, <u>Rpsl-k</u>
Weber BC	= Weber 84 (1985)	Weber(5) x Century, <u>Rpsl</u>

C, CPRX, CS: Purdue (Indiana) A.E.S.

C2	40-42 III, 42-43 IV	Dunfield x Midwest; = CX231-261-1-1-1
C4	40 III	Illini x Mandell; = CX331-97-1-3-1
C6	41-42 IV	" x " ; = CX331-200-1-2-1
C7	41 II	" x " ; = CX331-412-1-2-1
C28	= Earlyana (1943)	hybrid in Dunfield; = CX931-1
C39	42 I	" " " = CX931-2-4
C40	42 I	" " " = CX931-2-6
C56	42-43 III	Illini x Mandell; CX331
C60	42-43 III	" x "
C62	39 II	" x Midwest; = CX431-281-1-7-2
C66	42-43 III, 44 II	Dunfield x Manchu(MM-21); CX831
C72	42-43 III	" x " "
C79	40-41 III	Illini x Mandell; = CX331-129-2-2-2
C83	41 II	" x Midwest; = CX431-204-1-2-2
C84	43-45 III	Midwest x Dunfield; CX531
C91	43 III	Dunfield x Manchu; CX831
C101	43 III, 44-46 IV	" x "
C143	39-40 IV	= PI 70.218-2-6-7; sib of Patoka
C146	41-42 IV	Dunfield x Midwest; = CX231-14-1-3-1-7-1
C148	41-42 IV	" x " = CX231-55-1-10-1-25
C149	40-42 IV	" x " = CX231-108-2-8-1-5-1
C150	40 IV	" x " = CX231-108-2-8-1-5-5
C151	39-40 IV	" x " = CX231-187-1-2-1-4
C153	41-42 IV	" x " = CX231-298-1-1-1-1-9
C154	41-42 IV	" x " = CX231-376-1-2-2-6-4
C155	41-42 IV	" x " = CX231-393-1-2-1-4-9
C156	40-41 IV	Illini x Mandell; = CX331-51-14-1-7-4
C160	41-42 IV	" x " = CX331-136-1-1-1
C162	40 II	" x " = CX331-407-1-1-2
C163	41 II	" x " = CX331-457-2-3-1
C164	41 II	* " x Midwest; = CX431-39-1-3-1
C167	39-41 IV	Midwest x Dunfield; = CX531-265-1-5-5
C168	39-40 IV	" x " = CX531-265-2-1-1
C169	= Gibson (1942)	" x " = CX531-265-2-1-1-8
C170	40 IV	" x " = CX531-265-2-1-2
C171	39-41 IV	" x " = CX531-468-3-3-2
C172	39-40 IV	" x " = CX531-468-3-3-2-7
C173	40 IV	Dunfield x MM-31; = CX731-63-1-1
C174	40 IV	" x " = CX731-128-1-3
C175	41-42 IV	" x " = CX731-268-1-5-2-9
C178	40-42 IV	" x MM-21; = CX831-88-3-1-3-3
C180	40-41 IV	" x " = CX831-151-2-5-2-5

C183	40-41 IV	Dunfield x MM-21; = CX831-362-1-3-1-6-5
C185	39 IV	" x MM-31; = CX731-66-1-1
C232	39 IV	Midwest x Dunfield; = CX531-265-2-1-1-2
C233	39 IV	" x " = CX531-265-2-1-1-6
C235	39 IV	" x " = CX531-265-2-1-1-7
C240	39 IV	" x " = CX531-468-3-3-2-3
C415	44 PIV	from hybrid population = L37-1060-1
C418	44 PIV	T117 x Mansoy; = L38-9-2
C423	44 PIV	" x " ; = L38-284-10
C425	44 PIV, 45-46 IV	" x " ; = L38-319-1
C428	44 PIV	" x " ; = L38-325-2
C429	44 PIV	Dunfield x " ; = L38-345-1
C432	44 PIV	" x " ; = L38-401-7
C435	44 PIV	" x " ; = L38-405-9
C436	44 PIV	Dunfield x Mansoy; = L38-416-1
C439	44 PIV, 45-46 IV	" x " ; -15
C445	44 PIV	" x " ; = L38-546-1
C447	44 PIV, 45-46 IV	" x " ; = L38-605-2
C448	44 PIV	" x " ; -7
C453	44 PIV, 45-46 IV	" x " ; = L38-619-3
C455	44 PIV	" x " ; -8
C457	44 PIV	T117 x Mansoy; = L38-701-4
C458	44 PIV, 45-46 IV	Dunfield x Mansoy; = L38-717-2
C461	44 PIV, 45-46 III, 45-46 IV	" x " ; = L38-748-1
C462	44 PIV	" x " ; -2
C463	= Wabash (1948)	" x " ; -4
C464	44 PIV, 45-46 IV	" x " ; -10
C467	44 PIV	" x " ; = L38-782-1
C470	44 PIV, 45-46 IV	rogue in PI 54.592 ; = L38-930-1
C474	47 PIV	C143 x C171
C477	47 PIV	" x "
C482	47 PIV	Dunfield x C143
C483	47 PIV	" x "
C484	47 PIV	" x Richland
C487	47 PIV	" x Patoka
C488	47 PIV	Patoka x C171
C489	47 PIV	" x "
C490	47 PIV, 48-49 IV	" x "
C494	47 PIV	" x C168
C496	47 PIV	C143 x C240(from C171)
C497	47 PIV	" x "
C498	47 PIV	" x "
C499	47 PIV, 47-48 IV	" x "
C500	47 PIV, 47-48 IV	" x "
C501	47 PIV, 48-49 IV	" x "
C502	47 PIV, 47-49 IV	" x "
C508	47 PIV, 46-48 IV	Patoka x L37-1355; see C612 = Perry
C509	46 II	L37-1355 x Richland
C520	47 PIV	C143 x Dunfield
C521	47 PIV	" x "

C522	47 PIV	C143 x Dunfield
C523	47 PIV	" x "
C525	47 PIV	" x "
C529	47 PIV	" x "
C534	47 PIV	Dunfield x Richland
C537	47 PIV	" x Patoka
C538	47 PIV	" x "
C612	= Perry (1952)	Patoka x L37-1355; from C508
C616	47 PI	Habaro x Mandarin
C683	50-52 II	Mukden x Richland
C739	49-50 II	Lincoln(2) x "
C745	49 PI	" x "
C764	50 III	" x "
C776	49-50 II	" x "
C785	48 PIII	Lincoln x (Richland x Earlyana)
C786	48 PIII	" x " "
C787	48 PIII	" x " "
C788	48 PIII	" x " "
C789	48 II	" x " "
C790	48 II	" x " "
C791	48 II	" x " "
C794	50 PIV	" x Patoka
C799	50 PIV	C143 x Lincoln
C801	50 PIV	" x "
C805	50 PIV, 51 IV	" x "
C859	54-56 III, 55 PIII	Dunfield x "
C873	52-53 II	" x "
C931	52-53 II	Lincoln x Earlyana
C974	50 PIII	" x (Richland x Earlyana)
C975	50 PIV	" x " "
C976	50 PIII, 51 IV	" x " "
C977	50 PIII, 51 III	" x " "
C978	50 PIII, 51 III	" x " "
C979	50 PIV, 51 IV	" x " "
C980	50 PIII	" x " "
C981	50 PIII, 51 III	" x " "
C982	50 PIV	" x " "
C983	50 PIII, 51-52 III	" x " "
C984	50 PIV	" x Ogden
C985	50 PIV, 51-56 IV	" x " ; =LX1061-9; see C1065 to 1079
C986	50 PIV, 51 IV	" x " ; see C1082 to 1085
C1013	53 II	" x (A45-251 x Earlyana)
C1024	52-53 II	" x " "
C1048	53-56 IV	" x (Dunfield x A45-251)
C1056	53-56 II	Lincoln(2) x A45-251
C1057	53 II	" x "
C1060	53-56 III	" x "
C1065	53 PIV, 54-56 IV	from C985
C1066	53 PIV	" "
C1068	= Kent (1961)	" "

C1069	53 PIV, 54-58 IV	from C985
C1070	53 PIV	" "
C1071	53 PIV, 54-56 IV	" "
C1073	53 PIV	" "
C1074	53 PIV, 54-56 IV	" "
C1076	53 PIV, 54-56 IV	" "
C1078	53 PIV, 54-56 IV	" "
C1079	53 PIV, 54-56 IV	" "
C1082	53 PIV	from C986
C1085	53 PIV	" "
C1105	54,56 PI, 55 PII, 56 II	Hawkeye x Mandarin (Ottawa)
C1106	54,56 PI, 55 PII, 56-57 II	" x " "
C1109	54 PI	Mukden x " "
C1112	54 PI	Mandarin (Ottawa) x Lincoln
C1117	= Lindarin (1958)	" " x "
C1119	54,56 PI, 55 PII	" " x "
C1121	54 PI, 55 PII, 56 II	" " x "
C1128	54-58 II, 55 PIII, 58,62 III	Wabash x Hawkeye
C1129	55 PIII	" x "
C1142	57 PII	" x Mandarin (Ottawa)
C1147	56 PII	" x " "
C1160	57 PII, 58-60 II	Perry x Mandarin (Ottawa)
C1162	57 PIII	Lincoln x Bavender Special-2
C1166	57 PIII	x " " "
C1212	60 PIII, 61-62 III	LX1061-9-9 x Blackhawk
C1213	59 II	C1067 x Monroe; from CX185A-25-1
C1220	60 PIV, 61-62 IV	LX1061-9-15 x Richland
C1223	60-61 III	C1070 x Adams; from CX192-28-3
C1225	= Adelphia (1964)	" x " " "
C1236	60 PIII	L46-1503 x (Mukden x Capital)
C1238	60 PIII	LX1061-9-9 x Blackhawk
C1239	60 PIV	Wabash x C1066
C1243	60 PII	PI 68.521 x Wabash
C1245	60 PIV	Korean x C1067
C1253	64 PII	Blackhawk x Harosoy
C1255	61 PI, 62-64 I	Harosoy x Clark
C1264	61 PII, 62-63 II	" x C1079
C1265	61 PII, 62-63 II	" x "
C1266	61 PIV, 62-63 IV	" x "
C1268	61 PIV, 62 IV	" x "
C1273	62 PII, 63 II	Mandarin (Ottawa) x Clark
C1276	62 PIII, 63-64 III	" " x "
C1278	= Cutler (1968)	C1069 x Clark
C1279	62 PIV	" x "
C1282	62 PIV, 63-64 IV	" x "
C1285	62 PIV	" x "
C1291	62 PIII, 63 III	Mandarin (Ottawa) x C1069
C1294	61 II	Lindarin(5) x Mukden, <u>Rps1</u>
C1294R	= Lindarin 63 (1963)	from C1294

C1295	63 PI	Mukden x Mandarin (Ottawa)
C1296	63 PI, 64 I	" x "
C1299	63 PI, 64 I	" x "
C1301	63 PI, 64 I	" x "
C1306	63 PIV, 64 IV	C1069 x Clark
C1311	63 PIV, 64-67 IV	Wabash x C1069
C1315	= Lindarin 63 (1964)	Lindarin(8) x Mukden, <u>Rps1</u> ; substituted for C1294R in 1964
C1316	63 PIV	rogue in Kent
C1317	63,65-66 III	C1223(8) x Mukden, <u>Rps1</u>
C1317-71 -99	64 III	" " x "
C1328	64 III	" " x "
C1329	64 PII	Harosoy x C1069
C1335	64 PII, 65 II, 66 III	" x "
C1336	64 PIII, 65 III	" x "
C1339	64 PIII	" x "
C1342	64 PII	" x "
C1344	64 PII	" x "
C1347	65 PII, 66 III	Lindarin x A50-8618-1
C1350	65 PII	" x "
C1359	65 PIII	" x Clark
C1361	65 PIII	" x Harosoy
C1362	65 PII, 66-67 III	" x "
C1367	65 PIII, 66 III	" x Shelby
C1373	65 PIII	[Lindarin x sel.(PI 65.338 x C1079)] x (Lindarin x L49-4196-12)
C1375	65 PII, 66 III	same as above
C1376	= Protana (1969)	sel.(Mukden x C1069) x sel.(PI 65.338 x C1079)
C1379	66 PIII	Lindarin(2) x L49-4196-12
C1387	66 PIII	C1223(3) x Mukden
C1390	66 PIII	" " x "
C1402	66 PII	C1128 x Mukden
C1415	67 PII	C1069 x Chippewa
C1421	66-67 III	Adelphia(8) x Mukden, <u>Rps1</u>
C1423	66 PIV, 67-68 IV	C1266R(8) x C1253, <u>Rps1</u>
C1424	66 PII, 67 II	C1253 x Kent
C1425	66 PII	" x "
C1426	66 PII, 67-69 II	C1253 x Kent
C1427	66 PII	" x "
C1428	66 PII	" x "
C1429	= Beeson (1968)	" x "
C1430	66 PII, 67 II	" x "
C1431	66 PII, 67-68 II	" x "
C1432	66 PII, 67 III	" x "
C1433	66 PII	" x "
C1434	66 PIII	" x "
C1435	66 PIII, 67 III	" x "
C1436	66 PIII	" x "
C1437	= Calland (1968)	" x "

C1438	66 PIV	C1253 x Kent
C1439	66 PIV, 67 IV	" x "
C1440	66 PIV	" x "
C1441	66 PIV	" x "
C1444	67 PII	" x "
C1445	67 PII	" x "
C1446	67 PII	" x "
C1447	67 PII, 68 II	" x "
C1448	67 PII	" x "
C1449	67 PIII, 68 III	" x "
C1450	67 PIII	" x "
C1451	67 PIII	" x "
C1452	67 PIV, 68 IV	" x "
C1453	67 PII, 68-70 II	C1266R x C1253
C1454	67 PIII	" x "
C1455	67 PIV, 68 IV	" x "
C1456	67 PIV, 68-69 IV	" x "
C1457	67 PIV, 68 IV	" x "
C1458	67 PIII	" x "
C1469	68 PII	" x "
C1470	= Wells (1972)	" x "
C1471	68 PIII, 69 III	" x "
C1472	68 PIII	" x "
C1473	68 PIV, 69 IV	" x "
C1474	= Bonus (1971)	" x "
C1475	68 PIV, 69 IV	" x "
C1476	68 PIV, 69 IV	" x "
C1477	68 II	Amsoy(8) x C1253, <u>Rps1</u> ; composite of CX407BC7 -53, -307, and -310
C1479	69 II	(C1264(6) x Wayne, <u>rxp</u> ) x (C1264(8) x C1253, <u>Rps1</u> )
C1480	69 IV	(C1266R(7) x Wayne, <u>rxp</u> ) x (C1266R(8) x C1253, <u>Rps1</u> )
C1481	= Cutler 71 (1971)	Cutler(4) x SL5, <u>Rps1</u>
C1483	70 PIV, 71 IV	C1266 x C1265
C1502	72 PIII	C1317-71 x Amsoy
C1503	72 PIII	" x "
C1504	72 PIII, 73 III	" x "
C1505	72 PIII	" x "
C1506	72 PIII	" x "
C1506Y	73 III	" x " ; from C1506
C1507	72 PIII	" x C1253
C1508	72 PIII, 73-74 III	" x "
C1509	72 PIII	" x "
C1510	72 PII	Wayne x C1317-71
C1511	72 PIV	" x "
C1512	72 PII, 73 II	(F1 Amsoy x C1253) x (F1 Wayne x C1317-71)
C1513	72 PIII	(F1 Amsoy x C1253) x (F1 Wayne x C1317-71)
C1514	73 PIII	C1432 x C1430
C1515	73 PIII, 74 III	" x "

C1516	73 PIII	C1432 x C1430
C1517	73 PIII	C1430 x C1436
C1518	74 PIV, 75 IV	Amsoy x Cutler
C1519	74 PIV	" x "
C1520	74 PIV, 75 IV	Bonus x "
C1521	74 PIV	" x "
C1522	75 PII	Beeson x L63-1397( <u>Harosoy-Dt2</u> )
C1523	75 PII, 76 II	" x "
C1524	75 PII	" x "
C1525	75 PIII	Calland x "
C1526	75 PIII	" x "
C1527	75 PIII	" x "
C1528	75 PIII, 76 III	" x "
C1529	75 PIII, 76 III	" x "
C1530	75 PII	Beeson x "
C1531	76 PII	L63-0007-1 x CX407BC7-255( <u>Amsoy-L2 Rps1</u> )
C1532	76 PIII	" x "
C1533	76 PII	L63-0007-2 x "
C1534	76 PII	" x "
C1535	76 PII	L63-0007-4 x "
C1536	76 PIV	L63-0096-1 x CX414-152
C1537	76 PIV	" x "
C1538	76 PIV	" x "
C1539	76 PII	C1421 x L63-1397
C1540	76 PIII	Calland x "
C1541	76 PIII, 77 III	C1421 x Calland
C1542	76 PIII	" x "
C1543	76 PIII	" x "
C1544	76 PII	Beeson x Bonus
C1545	= Century (1979)	Calland x "
C1546	76 PII	" x "
C1547	76 PII	C1471 x Beeson
C1548	77 PIII	Calland x L63-1397
C1549	77 PIII	Beeson x C1421
C1550	77 PII	" x "
C1551	77 PII	C1471 x Rampage
C1552	77 PIII	" x CX407BC7-255( <u>Amsoy-L2 Rps1</u> )
C1553	77 PII, 78 II	Williams x Beeson
C1554	77 PII	" x "
C1555	77 PIV	" x "
C1556	77 PIII	" x "
C1557	77 PIV	" x Bonus
C1558	77 PIII, 78 III	" x L69L-6-1
C1559	77 PIII, 78 III	" x "
C1560	77 PIV	" x "
C1561	77 PII	" x "
C1562	77 PIV	" x "
C1563	77 PIII	" x "
C1564	77 PIV	" x "
C1565	77 PIV	" x "

C1566	78 PII, 79 III	Beeson x PI 68.788
C1567	78 PIII	Williams x Beeson
C1568	78 PII	" x "
C1569	78 PIV	C1421 x Williams
C1570	78 PIII	" x "
C1571	78 PIII	" x "
C1572	78 PIV	" x "
C1573	78 PIV, 79 IV	" x "
C1574	78 PII	" x "
C1575	78 PIII	" x "
C1576	78 PII	Williams x Bonus
C1577	78 PIII	" x "
C1578	78 PIV	Beeson x L69L-6-1
C1579	78 PII	Williams x CX407BC7-255(Amsoy-L2 Rps1)
C1580	79 PII	Beeson x "
C1581	79 PII	" x "
C1582	79 PIV	M61-224 x Williams
C1583	79 PIII	" x "
C1584	79 PI	L72-844C-1 x Wells
C1585	80 PIV	Wells x UFV-1
C1586	80 PIV	L72-844C-1 x CX456-90
C1587	80 PIV	" x Wells
C1588	80 PIV	" x "
C1589	80 PIV	" x "
C1590	81 PIIA	Beeson x CX407BC7-255(Amsoy-L2 Rps1)
C1591	81 PIIA	Woodworth x C1508
C1592	81 PIIA	C1524 x CX521-71
C1593	81 PIIIB	CX557 x CX407-BC7-255
C1594	81 PIIIB	Woodworth x Hodgson
C1595	81 PIIIB	A-100 x Woodworth
C1596	81 PIIIB	Woodworth x C1524
C1597	81 PIIIB	" x "
C1598	81 PIV, 82 IV	Wells x CX463-3
C1599	82 PIIIB	C1311 x C1504
C1600	82 PIIIB	C1504 x Wells
C1601	82 PIIIB	" x "
C1602	82 PI	Wells x C1512
C1603	82 PIIIB, 83 II	" x "
C1604	82 PIIIB	C1512 x Calland
C1605	82 PIIIB	" x "
C1606	82 PIIIB	Hodgson x Tracy
C1607	82 PIIIB	A-100 x C1524
C1608	82 PIIIB	Hodgson x C1528
C1609	82 PIIIB	Woodworth x C1524
C1610	82 PIIIB	" x "
C1611	82 PIIIB	" x CX521-71
C1612	82 PIIIB	CX588-78 x A73D22
C1613	82 PIIIB	CX621-318 x CX588-78
C1614	82 PI	A73D22 x CX621-318
C1615	82 PIIIB	" x "

C1616	82 PIIIB	CX588-78 x CX597-169
C1617	82 PIV	" x "
C1618	83 PIIIB	Harcor x Century
C1619	83 PIIIB	" x Cumberland
C1620	83 PIIIB	" x "
C1621	83 PIV	" x "
C1622	83 PIIIB	" x L69U37-17-5
C1623	83 PIIIB, 84 III	" x "
C1624	83 PIV	Union x Harcor
C1625	83 PIIB, 84 II	Century x Hodgson
C1626	83 PIIIB	" x "
C1627	83 PIIB, 84-85 II	" x "
C1628	83 PIIB, 84 II	" x "
C1629	83 PIIB	Century x Hodgson
C1630	83 PIIIB	Hodgson x Cumberland
C1631	83 PIIIB, 84-85 III	" x "
C1632	83 PIIB	L69U37-17-5 x Hodgson
C1633	83 PIIIB	Weber x Century
C1634	83 PIIIB	Union x "
C1635	83 PIV, 84-85 IV	" x "
C1636	83 PIIB, 84 II	" x "
C1637	83 PIV	" x "
C1638	83 PIIB, 84 II	Century x Wells II
C1639	83 PIIB	* <u>Century</u> x " "
C1641	84 PIVA	Hodgson x Union
C1642	84 PIVA	" x "
C1643	84 PIIIB	Weber x L69U37-17-5
C1644	84 PIIIB	" x "
C1645	84 PIVA	Union x Weber
C1646	84 PIIIB	Cumberland x Century
C1647	84 PIIIB, 85 III	L69U40-16-4 x Cumberland
C1648	84 PIIIB	CX590-122 x Century
C1649	84 PIIIB	Nebsoy x Century
C1650	84 PIIB	" x "
C1651	84 PIIB	A75-305022 x Century
C1652	84 PIIIB	" x "
C1653	= Spencer (1988)	" x "
C1654	84 PIVA	A76-304020 x "
C1655	84 PIIIB, 85 III	Hobbit x Century
C1656	84 PIVA	" x "
C1657	84 PIVA, 85-86 IV	" x "
C1658	84 PIIB	Century x CX744-12-2
C1659	84 PIVA	Nebsoy x A76-304020
C1660	84 PIIB	" x "
C1661	85 PIIIB	L70L-3048 x Hardin
C1662	85 PIVB	A75-305022 x Century
C1663	85 PIIB	" x "
C1664	85 PIIB	" x "
C1665	85 PIVB, 86 IV	Nebsoy x A75-305022
C1666	85 PIVB	Williams 82 x CX540-21-1-2-1-1-1

C1667	85 PIIIB	Williams 82 x CX750-82
C1668	85 PIVB	Hobbit x CX663-37-2-2
C1669	85 PIIIB	" x "
C1670	85 PIVB	" x "
C1671	85 PIIIB	" x K1048
C1672	85 PIIIB	" x "
C1673	85 PIVB	" x "
C1674	85 PIIB	" x M70-128(Dawson)
C1675	85 PIIIB	" x Lakota
C1676	85 PIIB	" x "
C1677	85 PIIIB	" x "
C1678	85 PIIB, 86 II	" x "
C1679	85 PIIB	" x Amcor
C1680	85 PIIIB	" x "
C1681	85 PIIIB	" x "
C1682	85 PIIIB	K1048 x CX663-37-2-2
C1683	85 PIVB	M70-128(Dawson) x CX663-37-2-2
C1684	85 PIIIB	M70-128 x CX663-37-2-2
C1685	85 PIVB	Lakota x "
C1686	85 PIIB	" x "
C1687	85 PIIIB	Amcor x "
C1688	85 PIIB	Amcor x "
C1689	86 PIIB	A77-314013 x Lakota
C1690	86 PIIB	" x "
C1691	86 PIIB	" x Dawson
C1692	86 PIVB, 87-88 IV	" x L73-4673
C1693	86 PIIIB	L73-4673 x U37219
C1694	86 PIIIB	Hobbit x Amsoy 71 <u>dt</u>
C1695	86 PIIIB, 87 III	" x " " "
C1696	86 PIIB	" x " " "
C1697	86 PIIIB	Hardin x Lawrence
C1698	86 PIIIB	L73-4673 x Pella
C1699	86 PIIIB	" x "
C1700	86 PIIIB	Amsoy 71 dt x HC76-4030
C1701	86 PIIIB	" " " x "
C1702	86 PIIIB	" " " x "
C1703	87 PIIB	Hobbit x Dawson
C1704	87 PI	Dawson x U37219
C1705	87 PIIIB	A77-314013 x L73-4673
C1706	87 PIIB	Hardin x Century
C1707	87 PIIIB	" x Pella
C1708	87 PIIIB	" x "
C1709	87 PI	L73-4673 x Wells II
C1710	87 PIIIB	" x " "
C1711	87 PIIB	" x " "
C1712	87 PIIB	A78-121014 x HW79015
C1713	87 PIIIB	" x "
C1714	87 PIIIB	A78-227016 x "
C1715	87 PIIB	" x Sparks
C1716	87 PIIB	C1590 x HW79015

C1717	87 PIIIB, 88 III	HW79015 x Cumberland
C1718	87 PIIIB	" x "
C1719	87 PIIIB	" x A79-334010
C1720	87 PIIIB, 88-89 III	" x "
C1721	87 PIIIB	" x Sparks
C1722	87 PIIIB	" x "
C1723	87 PIV	" x "
C1724	87 PIIIB	Winchester x PRX58-35
C1731	88 PIIIB	Century 84 x Williams 82
C1732	88 PIIIB, 89 II	" " x Harper
C1733	88 PIIIB	" " x "
C1734	88 PIIIB	" " x "
C1735	88 PIIIB	A80-244003 x Century 84
C1736	88 PIIIB, 89 II	" x " "
C1737	88 PIVA	" x " "
C1738	88 PIVA, 89 IV	" x " "
C1739	88 PIVA	" x " "
C1740	88 PIVA	" x " "
C1741	88 PIVA	" x " "
C1742	88 PIVA, 89 IV	" x " "
C1743	88 PIVA	" x " "
C1744	88 PIIIB	" x " "
C1745	88 PIVA	" x " "
C1746	88 PIIIB	" x Williams 82
C1747	88 PIIIB, 89-90 IV	" x " "
C1748	88 PIIIB	Williams 82 x Harper
C1749	88 PIIIB	Ix93 x Williams 82
C1750	88 PIIIB	Harper x C1640, T280
C1751	88 PIIIB	" x "
C1752	88 PIIIB	" x "
C1753	88 PIIIB	" x "
C1754	88 PIIIB	A8 x Williams 82
C1755	89 PIVB	Miami x Williams 82
C1756	89 PIIA	C1622 x Harper
C1757	89 PIIA	C1627 x "
C1758	89 PIVB, 90 IV	" x "
C1759	89 PIIIB	" x CX782-257-3-1
C1760	89 PIIIB	" x "
C1761	89 PIIA	" x "
C1762	89 PIIIB	" x "
C1763	89 PIIA	" x "
C1764	89 PIIA, 90 II	Sparks x Century
C1765	89 PIIA	" x Harper
C1766	89 PIVB	" x "
C1767	89 PIVB	Winchester x Harper
C1768	89 PIVB, 90 IV	" x "
C1769	89 PIIIB	" x "
C1770	89 PIVB	" x "
C1771	89 PIVB	" x "
C1772	89 PIIA	" x Preston

C1773	89 PIIIB	CX773-28-3-4 x CX663-37-2-2-1-6
C1774	89 PIIIB	" x "
C1775	89 PIIIB	" x "
C1776	89 PIIIB	" x "
C1777	89 PIIIB	" x "
C1778	89 PIVB	CX859-112 x "
C1779	89 PIVB	" x "
C1780	89 PIVB	" x "
C1781	89 PIVB	" x "
C1782	89 PIIIB	CX773-28-3-4 x CX859-112
C1783	89 PIVB	" x "
C1784	89 PIIIB	" x "
C1785	90 PIVB	" x CX663-37-2-2-1-6
C1786	90 PIIB	C1623 x A81-151026
C1787	90 PIIB	C1627 x C1623
C1788	90 PIIIB	C1643 x Ripley
C1789	90 PIIIB	" x "
C1790	90 PI	Hack x C1627
C1793	90 PIII A	" x C1643
C1794	90 PIIB	" x "
C1795	90 PIIB	C1627 x A81-151026
C1796	90 PIIB	" x "
C1797	90 PI	" x "
C1798	90 PIIIB	C1641 x C1651
C1799	90 PIIB	C1643 x HC78-2836
C1800	90 PIIB	C1651 x A81-151026
C1802	90 PIIB	" x C1627
C1803	90 PIVA	Bradley x L80-4323
C1804	90 PIVA	" x "
C1811	90 PIVA	Spencer x C1640, T280
C1813	90 PIVA	C1655 x Pella 86
C1818	90 PIIB	C1664 x " "
C1819	90 PIII A	" x C1680
C1822	90 PIIB	C1671 x C1676
C1825	90 PIII A	C1665 x Pella 86
C1826	90 PIVA	Williams 82(3) x (PI 54.615-1 x PI 86.050)
CPRX67WTP	83 PIIA	* Wells II(7) x PRX9-274, Rps3
CPRX73BC5-57G	85 PIIIB	Oakland(6) x PRX12-305

Cross Year-Pedigree Numbers: (e.g. CX231 means cross number 2 made in 1931.)

CX231-108-2-8-1-5-1	= C149	Dunfield x Midwest
-5	= C150	" x "
-187-1-2-1-4	= C151	" x "
-261-1-1-1	= C2	" x "
CX331-51-14-1-7-4	= C156	Illini x Mandell
-97-1-3-1	= C4	" x "
-129-2-2-2	= C79	" x "
-407-1-1-2	= C162	" x "
CX431-281-1-7-2	= C62	" x Midwest

CX531-265-1-5-5	= C167	Midwest x Dunfield
-2-1-1	= C168	" x "
-2-1-1-2	= C232	" x "
-2-1-1-6	= C233	" x "
-2-1-1-7	= C235	" x "
-2-1-1-8	= Gibson (1942)	" x Dunfield = C169
-2-1-2	= C170	" x "
-468-3-3-2	= C171	" x "
-3-3-2-3	= C240	" x "
-3-3-2-7	= C172	" x "
CX731-63-1-1	= C173	Dunfield x MM-31;
-66-1-1	= C185	" x "
-128-1-3	= C174	" x "
CX831-88-3-1-3-3	= C178	" x MM-21
-151-2-5-2-5	= C180	" x "
-362-1-3-1-6-5	= C183	" x "
CX931-1	= Earlyana (1943)	natural hybrid in Dunfield; = C28
CX6742-11	48 PIV	Lincoln x Patoka
-16	48 PIV	" x "
-20	48 PIV	" x "
-22	48 PIV	" x "
-34	48 PIV	" x "
CX6842-17	48 PIV	Gibson x Lincoln
CX7342-27	48 PIV	C143 x Lincoln
-39	48 PIV	" x "
-42	48 PIV	" x "
-53	48 PIV	" x "

#### Cross-Pedigree Numbers:

CX144-115	57 PIII	Mukden x Capital
CX147-25	57 PI	Perry x "
CX166-103N-1	56 PIII, 57 III	L46-1503 x Bavender Special-2
CX168-46-5	56 PIII, 57 III	Mandarin (Ottawa) x L46-2132
CX169-9-2	56 PIII, 57 III	Mukden x "
CX171-87-3-1	57 PIV	Wabash x "
CX184B-207-3	56 PIII	LX1061-9-9 x Blackhawk
CX185A-25-1	57 PI	C1067 x Monroe; see C1213
CX187-87-2	57 PIII	LX1061-9-30 x Earlyana
CX188-64-3	57 PIII	LX1061-9-15 x Richland
-97-3	57 PIV	" x "
CX192-27-2	56 PIII	C1070 x Adams
-28-3	56 PIII, 57 III	" x " see C1223 and C1225=Adelphia
-55-3	57 PIII	" x "
CX193-88-3	57 PIV	Perry x C1066
CX195B-122-1	57 PIV	Wabash x "

Note: CX231 to CX531 were natural crosses created by interplanting the parent varieties near beehives.

Published reports on Gibson state that it is CX531 = Dunfield x Midwest. Original Purdue crossing lists and Uniform Test reports give CX231 as Dunfield x Midwest and CX531 as Midwest x Dunfield. The contradiction is unresolved.

CX196-3-2	57 PIII	Dunfield x LX1061-9-35
-82-3	57 PIII	" x "
CX197-23-3	57 PI	L37-1355 x Mandarin (Ottawa)
CX198-H37	63 PIII	Perry x Monroe; Ohio strain
CX201-97-5	57 PII	L46-2132 x Adams
CX203-11-3	57 PI	L46-1503 x Mandarin (Ottawa)
CX208-23-3	57 PIII	Lincoln x PI 68.521
CX210-19-3	57 PIII	PI 68.521 x Wabash
CX224-6-5	57 PIV	Kingwa x C1067
-11-3	57 PIV	" x "
CX237-205-2	58 PIV	Wabash x C1079
CX252-3-1	58 PII	Harosoy x "
-7-4	58 PIII	" x "
-26-4	58 PII	" x "
-34-3	58 PII	" x "
-113-4	58 PIV	" x "
CX282-H16	63 PIII	Mukden x Mandarin (Ottawa); Ohio strain
CX286-304-4	60 PIV	C1069 x Clark
CX310	59 PIII	F3 composite of Shelby x A50-8618-1
CX314-50	62 PIII, 63 III	Ford x Shelby
-56	62 PIII, 63 III	" x "
-81	62 PIII, 63 III	" x "
-90	62 PIII	" x "
-92	62 PIII	" x "
CX403-209	69 PIV	C1266R x C1253
CX407BC7-50	69 II	Amsoy(8) x C1253, <u>Rps1</u> ; Amsoy 71 subline
-53	69 II	" " x " " " " "
-310	69 II	" " x " " " " "
-326	69 II	" " x " " " " "
(C)Amsoy 71 BC6 82 II (from 5th backcross)		Amsoy 71(6) x (PI 86.972-1, <u>Rps3</u> x PI 84.637, <u>Rpsl-b</u> )
C Beeson PR3	= Beeson 80 (1979)	Beeson(8) x Arksoy, <u>Rpsl-c</u>
(C)Beeson 80 BC6	= Keller (1983)	Beeson 80(7) x PRX9-249(PI 86.972-1, <u>Rps3</u> x PI 54.615-1)
(C)Cumberland BC	83 III	Cumberland(7) x (PI 86.972-1, <u>Rps3</u> x PI 84.637, <u>Rpsl-b</u> )
(C)Oakland BC	83 PIIIA	*Oakland(7) x (PI 86.972-1, <u>Rps3</u> x PI 84.637, <u>Rpsl-b</u> )
C-Union BC	= Regal (1986)	Union(8) x (PI 86.972-1 x PI 84.637, <u>Rpsl-b hm</u> )
(C)Wells BC6	= Wells II (1978)	* Wells(8) x <u>Arksoy, Rpsl-c</u>
(C)Wells II BC6	= Miami (1984)	Wells II(7) x PRX9-274(PI 86.972-1, <u>Rps3</u> x PI 54.615-1)
(C)Williams BC6	= Winchester (1984)	Williams(7) x PRX12-112(PI 86.972-1, <u>Rps3</u> x PI 84.637, <u>Rpsl-b</u> )
(C)Woodworth BC5	82 III	* Woodworth(6) x (PI 86.972-1, <u>Rps3</u> x PI 84.637, <u>Rpsl-b</u> )
MM-5	39 II	from Manchu
MM-15	39-40 II	from Manchu

CM: Agriculture Canada, Morden, Manitoba

CM1	64 P00, 65-67 00	Crest x L48-7289
CM2	64 P00	" x "
CM3	64 P00	Acme x Monroe
CM4	64 P00	" x "
CM5	64 P00	" x "
CM6	65 P00	" x L48-7289
CM7	65 P00	" x "
CM8	65 P00	" x Monroe
CM9	65 P00, 66 00	" x "
CM10	65 P00	" x "
CM11	65 P00	" x "
CM13	66 P00	" x "
CM17	66 P00	" x L48-7289
CM18	66 P00	" x "
CM21	66-67 P00, 68 00	" x "
CM21A	69 P00	" x " ; from CM21
CM21B	69 P00	" x " " "
CM24	67,69 P00	" x "
CM28	68 P00	" x "
CM29	67-68 P00, 69 00	" x "
CM30	= Morsoy (1970)	" x "
CM31	67 P00, 68 00	" x Monroe
CM45	69 P00	" x L48-7289
CM53	68 P00, 69 00	" x "
CM54	67 P0, 68 P00	UM3 x O57-2921
CM57	67 P0, 68 P00	Acme x Monroe
CM59	67 P0, 68 P00	from PI 257.438
CM61	67 P00, 68-69 00	Acme x L48-7289
CM64	67 P0	" x Monroe
CM70	67 P0, 68 P00	Crest x L48-7289
CM71	67 P0	H24088 x Crest
CM72	67 P0, 68 P00	" x "
CM78	69 P00	Acme x L48-7289
CM79	68 P00, 69 00	" x "
CM88	70 P00	" x Monroe
CM93	69 P00	" x L48-7289
CM103	70 P00	" x "
CM107	70 P00	" x "
CM108	70 P00	" x "
CM117	70 P00	" x Blackhawk
CM119	70 P00, 71-73 00	" x "
CM121	70 P00, 71,75 00	" x "
CM122	70 P00	" x "
CM127	70 P00, 71 00	" x "
CM139	71 P00	" x "
CM145	71 P00, 72-73 00	" x "
CM146	71 P00	" x "
CM147	71 P00, 75-76 00	" x "

CM148	71 P00, 75 00	Acme x Blackhawk
CM149	71 P00	" x "
CM151	71 P00	" x "

Cornell: New York A.E.S.

Cornell 1069-4-1-1-4-2	48 PI	Seneca x unknown
1136-5-3-1	48-49 PI	" x "
1175	48 PI	" x "
1196	48 PI	" x "

D: Mississippi A.E.S.

D56-8	48 PIV	Boone x Magnolia
D523-30	48 PIV	Dunfield x Arksoy
-55	48 PIV	" x "
Year-Line Nubers:		
D52-212	56 PIV	N48-1248 x Perry
D53-1	56 PIV	D49-2525 x L46-5679
-354	57-58 IV	" x "
D60-5702	64 PIV	Hill x D53-354
-5764	64 PIV	" x "
D62-6225	64 PIV	" x Sioux
D66-45	69 IV	D53-354(2) x D54-2437

Note: For D-lines from Illinois A.E.S. see page XX.

E: Michigan A.E.S.

E82046	85 PIIB	Northrup King S1346 x A76-202015E83015
	85 PIIB	Hardin x A75-305022
E83024	85 PI	M70-128 x "
E83053	85 PIIB	Hardin x "
E83054	85 PI	(Williams x D60-9647) x L74-3897
E83064	85 PIIB	HW7847 x [Hobbit x (Williams x Tracy)]
E83065	85 PIIB	" x " " "
E84005	86 PIIA	Sparks x Hardin
E84062	86 PIIA	Sprite x Altona
E84098	86 PIIA	" x Hardin
E84108	86 PIIA	" x "
E84113	86 PIIA	" x "
E84150	86 PIIA	" x Century
E84155	86 PIIA	" x L73-4673
E84159	86 PIIA, 87 II	" x "
E84165	86 PIIA, 87 II	" x "
E85077	87 PIIB	A80-244003 x Century 84
E85097	87 PIIB	" x U76168
E85098	87 PIIB	" x "
E85100	87 PIIB	" x "
E85110	87 PIIB, 88 II	" x "
E85166	87 PIIB	" x Miami
E85168	87 PIIB	" x "
E85171	87 PIIB, 88 II	" x "
E85239	87 PIIB	*Woodworth <u>BC5</u> x Keller
E86067	88 PIIB	A80-145015 x A79-135010
E86130	88 PIIB	*A80-147003 x A80-147005
E86237	88 PI, 89-90 I	*ProSoy PS104 x HW <u>8028</u>
E86300	88 PI	A80-244036 x A79-232026
E86315	88 PIIB, 89-90 II	HW8039 x Pella
E86325	88 PIIB	A78-227015 x HW8039
E86328	88 PIIB	Elgin x A80-244031
E86339	88 PIIB, 89-90 II	HW8039 x Elgin
E86348	88 PIIB, 89-90 II	" x A80-244035
E86359	88 PIIB	Century x A77-211021
E86367	88 PI	" x A80-144024
E86368	88 PIIB	" x "
E87012	89 PIIA	A81-155006 x Glenwood
E87053	89 PIIA	Evans x A80-147002
E87095	89 PIIA	BSR 101 x HW8039
E87127	89 PIIA	HW8039 x BSR 201
E87202	89 PIIA, 90 II	Corsoy 79 x HW8123
E87223	89 PIIA, 90 II	HW8123 x LN80-10508
E88550	90 PI	GL 2634 x Asgrow A1937
E88559	90 PI	Asgrow A1937 x Agripro AP200

	FC: Forage Crops Section, USDA	
FC 31.596	44-45 I	from Manchu
FC 32.176	= Smith in 53 IV	by H. W. Smith, West Frankfort, Ill.; also called "Smith Super"
FC 33.243	= Anderson in 49 III, 50 IV	rogue in Lincoln, H. J. Anderson, Calamus, Iowa

H, HA, HC, HM, HS, HW, HX: Ohio A.R.D.C.

H1	43-44 I	unknown; =D1
H2	43-45 I	Dunfield x Illini; LX339-4
H3	43-44 I	Scioto x Mandarin; LX349-11
H4	43-44 I	Mukden x " ; LX378-12
H5	= Monroe (1948)	" x " ; LX378-32
H5S	47 I	elite seed stock of H5
H6	43 III	Dunfield x Scioto; LX343-13
H8	43-44 II	" x Illini
H9	43 III	" x " ; LX339-10
H16-461	45-46 I	" x "
H22-461	46 0	" x "
H24-463	46 II	Mukden x Mandarin
H25-461	45-46 I	Scioto x "
H29-461	46 II	" x "
H38-461	45-46 0	" x "
H39-461	46 0	" x "
H50-461	45-46 0	Illini x "
H90-461	46 I	Mukden x "
H106-461	46-47 0	" x "
H113-461	45-47 I	" x "
H115-461	46-47 I	" x "
H131-463	46 II	Dunfield x Scioto
H133-461	45-46 I	Mukden x Mandarin
H167-463	46 II	Dunfield x Manchuria 13177
H170-461	45 I	unknown
H257-463	45-46 II	Illini x T95, Manchu line A
H2768	47 PI	Richland x Scioto; LX647
H2804	47 PI, 48 I, 49 II	" x "
H3665	49-50 II	" x Manchu 3; AX1519
H6150	47 PI, 48-50 II	Lincoln(2) x Richland
H6217	50-51 II	" " x "
H6403	47 PI, 48 I, 49-50 II	" " x "
H10042	54 PI	Lincoln x (Richland x C11)
H13116	54-56 II	" x " "
H13501	54-56 II	" x " "
H14025	54-56 II	" x Quebec 92
H14521	54-56 II	" x Ontario
H14551	55 PII	" x "
H15345	55 PII, 56 PI, 56 II	" x PI 68.666

H15548	54-55 II	Lincoln x PI 68.666
H20771	56 PII, 57 II	Monroe x Lincoln
H20771-9	= Madison (1960)	" x "
H20833-7	58 PII	" x "
H21162	56 PII, 57 III	" x "
H21793	56 PII, 57 II	Richland x H2
H21793-7	= Henry (1960)	" x "
H22218	56 PII	Monroe x Hawkeye
H24088	55 PII, 56 III	" x Lincoln
H24157	56 PII	" x "
H24157-4	= Ross (1960)	" x "
-5	58 PIII	" x "
H24167	56 PII	" x "
H82-24032	70 PI	" x Hawkeye
H105-9311	70 PII	H20833-7 x Harosoy
-9351	70 PIII	" x "
H124B-24110	70 PIV	*(H20833-7 x Henry) x (Blackhawk x PI 84.673-1)
H124C-1661	70 PIV	* " x " x " x -
H127-6742	70 PIV	Mukden x Mandarin (Ottawa)
-67410	70 PIV	" x " "
H128-1836	70 PIV	" x " "
H130-865	71 PII	Harosoy 63 x C1243
-2273	70 PIII	" " x "
-25021	70 PIII	" " x "
H131-7383	70 PIV	" " x "
-8755	70 PIV	" " x "
-10902	70 PII	" " x "
H133-5511	70 PIV	" " x "
H140-673	71 PI	L4 x L2
-1367	71 PI	" x "
H142-2894	71 PI	" x AX56P64-1
-2895	71 PII	" x "
H72-247	78 PIV	L63-3297 x L69L-6-1
H74-620	78 PIII	Williams x Ransom
-3382	78 PIII, 79 III	" x "
-3398	78 PIII	" x "
H75-9	78 PIII	" x "
-121	78 PIV	" x "
-729	78 PII	L66-531 x Williams
-796	78 PII	" x "
-4211	78 PIV	Wells x York
-4212	78 PIV	" x "
-5605	78 PIII, 79 II	Woodworth x V68-1034
H7703	78 PII, 79 II	Beeson x Wells
H7751	78 PIII	" x Md66-1258
H7772	78 PIV	L66L-137 x Calland

HA82-162012	84 PIIA	NK S1492 x Pride B216
-162032	84 PIIA	Pride B216 x A77-211021
-168008	84 PIIA	Pella x A78-326017
-168017	84 PIIA	" x A77-314013
-168018	84 PIIA, 85 II	" x "
-262012	84 PIIA	A77-314013 x Pella
-361013	84 PIIIA	Pella x NK S1492
HC74-634RE	82 PIIIA, 83-85 III	Williams x Ransom
HC75-6399	79 PII	M65-115 x L72D-549
HC76-644	79 PII	L66-531 x Williams
-710	79 PII	Wells x York
-1010	79 PII	Woodworth x L72U-758
-3710	79 PIII	L72U-2567 x Williams
-3711	80 PIII	" x "
-3715	79 PIII	" x "
-3790	79 PII	" x L72U-3331
-3840	79 PIV, 80 IV	" x Hodgson
-3863	80 PIII	" x Evans
-3914	79 PIV	L70U-2173 x L72U-2567
-4030	79 PIII, 80 III	L72U-2567 x Essex
-4054	79 PIII	" x L72U-41
-4091	79 PIV	Williams x "
-4092	79 PIII	" x "
-4373	79 PII	L72U-2567 x Williams
HC76-4374	80 PIII	L72U-2567 x Ransom
-4388	80 PIII	" x L72U-640
-4449	80 PIV, 81-83 IV	" x Essex
-4455	79 PIV	" x Ransom
HC77-689	82 PIIA	Hodgson x Gnome
-869	80 PII	Woodworth x V68-1034
-870	80 PII	" x "
-874	80 PII	Wayne x Dare
-876	80 PII	" x "
-878	80 PII	Woodworth x V68-1034
-951	80 PII, 81 II	" x V68-1038
-955	80 PII	Calland x York
-982	80 PIV	Williams x Ransom
-1165	80 PIV	Wells x V68-1034
-1418	80 PIII, 81 III	L72U-640 x Essex
-1419	80 PIII	" x "
-1489	80 PII	Hodgson x L72U-547
-2204	= Ripley (1985)	" x V68-1034
-2205	82 PIV, 83 IV	" x "
-5421	80 PIII	L72U-2567 x Wells
-5481	80 PIV	Evans x L72U-2567
-5535	82 PIIA	Amsoy 71 x Ransom
-5686	80 PIV	L72U-2567 x L72D-549

HC78-218	81 PIIIA	L72U-2567 x L72U-640
-261	81 PIV, 82 IV	" x Essex
-265	81 PIV, 83 PIIIA	" x "
-279	81 PIV, 82 IV, 83 III	" x "
-349	81 PIIIA, 82 IV, 83 III	" x "
-350	81 PIIIA, 82 IV, 84 PIIB	" x "
-352	81 PIIIA, 83 PIIIA	" x "
-353	81 PIIIA, 82 IV, 83 III	" x "
-354	82 PIIIA, 83 IV	" x "
-356	81 PIV, 82 IV	" x "
-523	= Hoyt (1986)	Harcor x Elf
-531	81 PIIIA	Elf x L74D-619
-535	81 PIV	" x "
-570	81 PIV	Essex x Elf
-595	81 PIV	Elf x L74D-678
-614	81 PI	Hodgson x Elf
-660	81 PIIB, 82 II	Essex x L74D-619
-674	81 PIIIA, 82 III	L70T-543G x L74D-619
-675	82 PIIA	" x "
-676	81 PIIIA, 82-84 III	" x "
-679	81 PIIB, 82 III	" x "
-681	81 PIIIA	" x "
-689	81 PIIB	A72-512 x L74D-619
-806	81 PIV	Essex x Elf
-826	81 PIIB, 82 II	Hodgson x L74D-619
-836	81 PI	L70T-543G x "
-837	81 PI	" x "
-840	81 PIIB	A72-512 x "
-1093	83 PIV, 84 IV	L72U-2567 x Essex
-1119	83 PIV, 84-85 IV	" x "
-1279	83 PIV, 84 IV	" x Ransom
-1292	82 PIIIA, 83 IV	" x "
-1318	82 PIIIA, 83 IV	" x "
-1326	82 PIIIA	" x "
-1565	81 PIIB	" x Evans
-1605	81 PIIB	L72U-2567 x Hodgson
-1626	83 PIV	" x Ransom
-1631	81 PIIIA, 82 PIIA	" x Hodgson
-1651	82 PIIIA, 83 IV	* " x Essex
-1884	82 PIIIA, 83 IV	" x "
-1922	85 PIVB	" x "
-1931	82 PIIIA, 83 IV	" x "
-1944	82 PIIIA	" x Ransom
-2021	81 PIIB	L72D-549 x Essex
-2026	81 PIIB	" x "
-2486	84 PIVB	L72U-2567 x Ransom
-2509	83 PIV, 84 IV	" x "
-2510	83 PIIIA, 84 IV	" x "
-2816	82 PIIIA	" x Essex
-2826	82 PIV	" x "

HC78-2829	82 PIV	L72U-2567 x Ransom
-2835	83 PIV	" x "
-2836	83 PIIIA, 84 IV	" x "
-2866	82 PIV	" x "
-2894	83 PIIIA	" x "
-2918	82 PIIIA	" x "
-3128	83 PIIIA	" x "
HC79-387	82 PIIA	Williams x Essex
-478	82 PIIA, 83 III	L70T-543G x L74D-619
-499	82 PIIA	L74D-20 x L74D-7
-786	82 PIIA	Gnome x Franklin(L73-6536)
-788	82 PIIA	" x " "
-794	82 PIIA	" x " "
-1233	83 PIIIA	L72U-2567 x Lee 74
-1260	82 PIV	" x Essex
-1264	85 PIVB	" x "
-1273	82 PIV	" x Ransom
-1276	82 PIV	" x "
-1332	83 PIV	" x Essex
-1334	82 PIV	" x Ransom
-1549	82 PIIIA	" x L72U-640
-1550	82 PIIA	" x "
-1575	83 PIV	" x Essex
-1625	82 PIV, 84 PIVB	* " x <u>Ransom</u>
-1630	83 PIIIA, 85 PIIIB	" x "
-1631	82 PIIIA	" x "
-1640	83 PIIIA	" x "
-1642	83 PIIIA	" x "
-1643	82 PIIIA, 83 IV	" x "
-1644	82 PIV, 83-85 IV	" x "
-1671	82 PIV	" x Lee 74
-1713	83 PIIIA	" x Ransom
-1734	83 PIV	" x Essex
-1735	83 PIV	" x "
-1737	83 PIV, 84 IV	" x "
-1786	82 PIIIA	" x Lee 74
-2547	82 PIV	" x Hodgson
-2562	83 PIIIB, 84 III	L74D-200 x Elf
-3100	84 PIIIB	Essex x Elf
-3126	82 PIV	L72U-2567 x Ransom
-3831	84 PIIIB	Essex x Elf
-3849	84 PIVB	" x "
-3850	84 PIIIB	" x "
-3962	85 PIVB	L74D-200 x Elf
-4085	85 PIIIB	Elf x L74D-678
HC80-256	85 PIVB	Essex x Elf
-490	83 PIIIB	D66-5566 x Elf
-585	84 PIIIB, 85-86 III	HC74-3400 x Sprite
-586	85 PIIIB, 86 III	" x "
-587	85 PIIIB, 86 III	" x "

HC80-589	84 PIIIB	HC74-3400 x Sprite
-590	85 PIIIB	" x "
-592	85 PIIIB, 86 IV	" x "
-593	84 PIVB	" x "
-595	85 PIIIB	" x "
-597	84 PIVB, 85 IV	" x "
-654	83 PIIB	Harcor x Sprite
-658	83 PIIB	" x "
-969	83 PIIB, 84 III	Gnome x "
-976	83 PIIB, 84 III	" x "
-984	83 PIIB	HC74-3386 x Sprite
-1054	83 PIIB, 84 III	Weber x Sprite
-1092	84 PIVB, 85 IV	Gnome x Ransom
-1209	84 PIIIB	Essex x Elf
-1211	84 PIVB, 85 IV	" x "
-1224	87 PIV	Ransom x Union
-1384	84 PIVB	Essex x Elf
-1417	84 PIIIB	" x HC74-3400
-1420	85 PIVB	" x "
-1604	84 PIVB	" x Elf
-1613	84 PIIIB	" x "
-1626	85 PIVB	H75-5605 x Sprite
-1742	85 PIIB, 86 II	Union x Gnome
-1755	84 PIIB	L73U-632 x Elf
-1756	84 PIIB, 85-86 II	" x "
-1938	84 PIIB	" x "
-1941	85 PIIB	" x "
-1942	84 PIIB	" x "
-1943	85 PIIB	" x "
-1944	84 PIIB, 85 II	" x "
-1946	84 PIIB, 85 II	" x "
-2030	85 PIIB	Elf x Gnome
-2272	85 PIVB	Gnome x Essex
-2280	84 PIIIB	" x "
-2479	84 PIIB	Elf x Gnome
-2549	84 PIVB	Union x "
-2649	84 PIIB	L75U-495 x Elf
-2652	87 PIIIB	* " x "
-2666	84 PIIIB	L74D-4 x Gnome
-2733	84 PIVB	L74D-2 x Elf
-5770	83 PIIB	Woodworth x V68-1034
-5894	85 PIVB	L72U-2567 x Ransom
-5952	84 PIVB	Essex x Elf
-6100	83 PIIB	Hodgson x Elf
-6143	83 PIIB	" x L74D-619
HC81-799	85 PIVB, 86 IV	Ransom x Williams
-817	85 PIVB, 86 IV	" x Union
-1134	84 PIVB, 85 IV	Gnome x Essex
-1334	84 PIIIB	" x "
-1511	87 PIIIB, 88 III	L74D-634 x Hobbit

HC81-1586	85 PIIIB	Sprite x Gnome
-1646	84 PIIIB	L74D-634 x Gnome
-1730	84 PIIIB	Hardin x Sprite
-1805	85 PIIIB	Hobbit x K10
-2072	85 PIIIB	HC74-678 x Hobbit
-2104	84 PIIIB, 85 III	" x Sprite
-2132	84 PIIIB	" x Gnome
-2268	85 PIIIB	Weber x Sprite
-2513	87 PIIIB	HC74-3386 x Sprite
-2792	85 PIIIB, 86 III	Gnome x Sprite
-3924	85 PIIIB	" x "
-3975	85 PIIIB	HC74-3400 x Sprite
-3983	87 PIV	Williams x "
-4011	85 PIIIB	HC74-3400 x Gnome
-4101	85 PIIIB	Gnome x Sprite
-4121	85 PIIIB	HC74-3400 x Sprite
-4234	85 PIVB	Essex x HC74-3400
-4452	87 PIIIB	HC74-1773 x Sprite
-4556	85 PIVB	HC74-3400 x "
-4561	85 PIVB	" x "
HC82-294	86 PIIIB	L70T-543G x L74D-619
-488	86 PIIIB	Essex x L74D-619
-1363	85 PIIIB	Williams x Ransom
-1386	85 PIIIB, 86 III	" x "
-3007	87 PIIIB	Sprite x Hobbit
-3146	87 PIIIB	" x "
-3164	87 PIIIB	L74D-634 x Hobbit
-3222	86 PIIIB	HW74-678 x "
-3406	86 PIVB	Essex x Hobbit
-3435	87 PIIIB	L74D-634 x Hobbit
-3447	86 PIIIB	" x "
-3452	86 PIIIB, 87 III	" x "
-3667	86 PIIIB	Sprite x Gnome
-4024	86 PIIIB	" x K74-104-76-167
-4039	87 PIIIB	" x K74-104-76-205
-4163	86 PIIIB	Hobbit x Gnome
-4176	86 PIIIB	" x "
-4427	86 PIIIB	Essex x Hobbit
-4692	86 PIIIB	Sprite x Gnome
-4965	87 PIIIB, 88 III	L74D-634 x Hobbit
-5044	86 PIIIB, 87 III	* <u>H</u> 75-5605 x "
-5156	87 PIIIB	L72U-2567 x Essex
-5210	85 PIIIB	Hodgson x L74D-619
-5265	87 PIV	L72U-2567 x Essex
-5519	86 PIVB	Essex x Hobbit
-5615	86 PIIIB	* <u>H</u> 75-5605 x Sprite
-5765	86 PIVB	Essex x Hobbit
-5934	86 PIVB, 87 III	Hobbit x A76-304020
-5950	86 PIIIB	Sprite x L76-0022
-6073	85 PIVB	Essex x Hobbit

HC82-6195	86 PIVB, 87 III	Sprite x L76-0022
-6267	86 PIVB	L74D-634 x Hobbit
-6270	86 PIVB	" "
-6415	86 PIVB	Hodgson x Sprite
-6529	86 PIVB	L74D-634 x Hobbit
-6611-1	87 PIV	Essex x Sprite
-6775-2	87 PIIIB	* <u>H</u> 75-5605 x Sprite
-6779	86 PIVB	" x "
-7189-3	87 PIIIB	L74D-674 x "
-7462	86 PIVB	Essex x Sprite
-7948-2	87 PIIIB	L74D-634 x Hobbit
-8038	86 PIVB	Essex x Sprite
-9680	85 PIIB	Elf x Gnome
-9700	85 PIIIB	" x "
-9717	85 PIIIB	" x "
-9720	85 PIIIB	" x "
HC83-525-3	87 PIIIB	Gnome x Williams 82
-584-1a	87 PIIB	Hardin x Gnome
-613-1	87 PIIB, 88 II	A77-314013 x Hobbit
-971-1	87 PIIB	Hobbit x L77-1836
-2398	87 PIIB	Sprite x Williams 82
-2408	86 PIIIB, 87 III	" x " "
-2458	86 PIIB	" x L77-1836
-2512	86 PIIIB	Hobbit x Williams 82
-2546	86 PIIIB, 87 III	" x " "
-2707	86 PIIB	HC76-4030 x Hobbit
-2808	86 PIIB	HC76-3840 x Williams 82
-2817	86 PIVB	" x " "
-2902	86 PIIB	HC76-644 x HC76-4030
-3277	87 PIIIB	HC76-4030 x Williams 82
-3834	86 PIIIB, 87 III	HC74-3400 x " "
-3958	86 PIIB	Hobbit x LN1060
-4053	87 PIV	HC76-4030 x Pixie
-4219	87 PIV	Amcor x L70T-543G
-4320	86 PIIIB	Essex x Sprite
-4507	86 PIIIB, 87 III	L74D-634 x Hobbit
-4513	87 PIIIB	" x "
-4522	86 PIVB	" x "
-4532	86 PIIIB, 87-89 III	" x "
-4589	86 PIVB, 87-88 III	" x "
HC84-180	88 PIIB, 89 III	Hobbit x K74-104-76-205
-238-2	87 PIIIB	HW74-678 x Sprite
-280-1a	87 PIV	Hobbit x Ransom
-468	89 PIIB	* <u>HW</u> 74-678 x Sprite
-553-1	87 PIIB, 88 III	Hobbit x K74-104-76-205
-913	88 PIIIB	Simpson x Sprite
-919	89 PIIB	" x "
-923	89 PIIB	" x "
-923-1	87 PIV	" x "
-1060	88 PIIB, 89 III	A72-512 x HC74-3400

HC84-1113-5	88 PIIIB	HC74-3400 x Hobbit
-1157	88 PIIIB	L73U-635 x Sprite
-1225	88 PIIIB	HC74-3400 x Essex
-1228	88 PIIIB	" x "
-1332-2	88 PIIIB	HC76-4030 x LN1060
-2001	88 PIIB	L73U-632 x HC74-3400
-2051	90 PIVB	Pella x Hobbit
-2063	88 PIVB	" x Sprite
-2125	88 PIVB	" x "
-2201	89 PIVB	HC76-4030 x Hobbit
-2481-1	87 PIIIB	HC78-353 x Sprite
-2514	87 PIV	Sprite x Ransom
-2568	88 PIIIB	HC78-676 x Asgrow A3127
-2575	88 PIIIB	HC78-353 x " "
-2594-x	87 PIV	Asgrow A3127 x Bedford
-2612	89 PIIIB, 90 III	HC78-676 x Hobbit
-4779	88 PIVB	Pella x Hobbit
-4845	88 PIVB	Amcor x HC74-3400
-4850	88 PIVB, 89-90 IV	Sprite x Williams 82
-4851	88 PIIIB, 89 IV	" x " "
-4874	88 PIVB, 89 III	Hobbit x " "
-6420	88 PIIB	Williams 82 x Gnome 85
HC85-35	90 PIVB	Hodgson 78 x Hobbit
-159	89 PIIB	HC78-676 x Sprite
-161	90 PIVB	" x "
-164	89 PIIIB, 90 III	" x "
-275	89 PIVB, 90 IV	HC78-353 x "
-276	90 PIVB	" x "
-279	89 PIVB, 90 IV	" x "
-282	90 PIVB	" x "
-366	90 PIIIB	" x Hobbit
-466	89 PIIB	HC78-826 x HC78-676
-477	89 PIIB, 90 III	HC78-676 x HW74-3400
-602	89 PIVB, 90 III	Sprite x Asgrow A3127
-603	90 PIIIB	" x " "
-604	89 PIIIB, 90 III	" x " "
-606	89 PIIIB, 90 III	" x " "
-607	89 PIIIB, 90 III	" x " "
-616	89 PIIIB	" x " "
-618	89 PIIIB, 90 III	" x " "
-685	89 PIIIB	HC78-676 x Asgrow A3127
-690	89 PIIIB, 90 III	" x " "
-744	90 PIIIB	" x " "
-767	90 PIVB	" x Hobbit
-768	89 PIIB	" x "
-1014	89 PIIIB	" x Asgrow A3127
-1232	89 PIIB	" x Hobbit
-1348	89 PIIB	" x Asgrow A3127
-1440	89 PIIB, 90 III	Hobbit x Forrest
-1554	89 PIVB	" x Ransom

HC85-1693	89 PIVB	Asgrow A3127 x Forrest
-1848	90 PIIIB	Pixie x [Elf(5) x Williams 82, <u>Rps1-k</u> ]
-1901	90 PIIIB	HC78-353 x Sprite
-2125	90 PIIIB	Pixie x L77-1836
-2132	90 PIIIB	" x "
-2133	89 PIVB	" x "
-2206	90 PIVB	Elf x Williams 82
-2211	89 PIIIB	" x " "
-2620	89 PIIB	Hobbit x L77-1836
-5097	89 PIVB	Amcor x L70T-543G
-5148	89 PIVB, 90 PIVA	Pella x Gnome
-5154	90 PIVA	" x "
-5176	88 PIVB	Amcor x A72-512
-5273	88 PIVB, 89 III	Asgrow A3127 x Forrest
-6004	90 PIVB	Pella x Hobbit
-6219	88 PIIB	L73U-632 x Gnome 85
-6405	88 PIIIB	Gnome 85 x Asgrow A3127
-6406	88 PIIIB	" " x " "
-6409	88 PIIB	" " x " "
-6450	88 PIVB	Hobbit x HC78-676
-6484	89 PIVB, 90 IV	Pixie x Forrest
-6498	88 PIVB	" x HC78-676
-6500	88 PIIIB, 89-90 III	" x "
-6508	90 PIVB	Essex x Weber
-6521	88 PIIIB, 89 III	Coker 237 x HC78-676
-6551	89 PIVB	HC78-350 x Essex
-6568	88 PIVB	" x HC78-676
-6577	88 PIVB, 89-90 III	" x "
-6606	90 PIVB	HC78-279 x HC78-676
-6611	89 PIIIB, 90 III	" x "
-6612	90 PIVB	" x "
-6716	89 PIIIB, 90 III	*HC <u>74</u> -634RE x "
-6723	88 PIVB, 89 IV	* " - x "
-6724	88 PIIIB, 89-90 III	" x "
HC86-554	90 PIIIB	" x "
-2950	90 PIVB	Asgrow A3127 x Ransom
-3403	90 PIVA	HC78-279 x Asgrow A3127
-4367	90 PIIIB	Asgrow A3127 x Sprite 87
-4384	90 PIIB	Pella x HC74-634RE
-4394	90 PIVB	" x Sprite 87
-4481	90 PIIB	HC78-354 x Gnome 84
-4499	90 PIIB	Hoyt x Corsoy 79
-4501	90 PIIB	" x " "
-4863	89 PIVB	HC78-354 x Pixie
-4899	90 PIVB	" x Williams 82
-4913	90 PIIB	Hoyt x Amcor
-4914	90 PIIB	" x HC78-354

HC87-3212	90 PIVB	Essex x Asgrow A3127
-3329	90 PIIIB	Coker 237 x HC78-676
-5844	90 PIIIB	Pixie x HC78-676
-5848	90 PIIIB	" x "
-6032	90 PIIIB	HC78-350 x Pella
HC Amcor	= Amcor 89 (1989)	Amcor(6) x Williams 82, <u>Rpsl-k</u>
HC Elf BC	86 III	Elf(6) x " " "
HC Elf-EB	90 PIVB	Elf(6) x " " "
(HC)Gnome <u>Rpsl-k</u>	= Gnome 85 (1985)	Gnome(6) x " " "
HC Hobbit BC	= Hobbit 87 (1987)	Hobbit(6) x " " "
HC Sprite BC	= Sprite 87 (1987)	Sprite(7) x " " "
HM8425	85 PIIB	Weber x K79-1
HM8426	85 PIIIB	A76-103002 x K79-1
HM8430	85 PIIB	A75-305022 x Shawnee
HM8467	85 PIVA	Asgrow A3127(2) x Williams 82(L24)
HM8469	= Flyer (1988)	* " " (4) x " "
HM8470	85 PIIIA, 86 III	" " " x " "
HM8471	= Resnik (1987)	" " " x " "
HM8472	85 PIIIA	" " " x " "
HM8473	= GR8836 (1987)	" " " x " "
HM8476	85 PIIB	Weber x K79-1
HM8481	85 PIIIA	Gnome x Williams 82(L24)
HM8482	= Hayes (1989)	Amcor x " "
HM8486	= GR8936 (1988)	Asgrow A3127 x Williams 82(L24)
HM8487	85 PIVA	" " x " "
HM8490	85 PIIIA	(Gnome x L24) x (A76-103002 x L24)
HM8494	85 PIIIA	*Hardin x L24) x [Asgrow A3127 x (A72-507BC x <u>K10</u> )]
HM8497	85 PIIIA	* same as above
HM8498	85 PIVA	Hardin(2) x Williams 82(L24)
HM84100	85 PIVA	(Hardin x L24) x (Asgrow A3127 x L24)
HM8530	86 PIIB	Gold Tag GT1250 x HW79022
HM8534	86 PIIIB	HW79116 x " "
HM8536	86 PIIB, 87 II	HW79149 x " "
HM8539	86 PIIB	PMGT-C2S1; Crop Sci. 24:213-214, 1984
HM8597	= Edison (1990)	HW79116 x HW79022; (as HM8579 in 1987)
HM8625	= Chapman (1990)	* 79-236002(3) x HW79149
HM8632	87 PIIB, 88-89 III	Zane(3) x HW79149
HM8634	87 PIIB, 88 II	" " x "
HM8635	87 PIIB, 88 II	" " x "
HM8636	87 PIIIB, 88-89 III	" " x "
HM8734	88 PIIB, 89-90 II	* A78-123018(2) x Century 84
HM8735	= Erie (1991)	* " " " x "
HM8776	88 PIIIB, 89 III	A80-147003 x Asgrow (A3127(4) x L24)
HM8777	88 PIIIB, 89 III	A79-236002(2) x Century 84
HM8778	88 PIIIB	Zane (4) x HW79149, <u>Rpsl-c Rps?</u>
HM8779	88 PIIIB	* A79-236002(2) x Century 84

HM8782	88 PIIIB	(Asgrow A3127(4) x L24) x PMGTC3S1
HM8783	88 PIIIB	" " " x "
HM87108	88 PIVB	A79-138024 x Harper
HM8842	88 PIIB	Gold Tag GT1250 x William 82
HM8843	88 PI	" " " x " "
HM8844	88 PIIB	" " " x " "
HM8845	88 PIIIB	HW79149 x HW79022
HM8846	88 PIIIB	" x "
HM8847	89 PIIIA	A80-244036 x (Asgrow A3127(4) x L24)
HM8849	88 PIIIB	PMGTC2; Crop Sci. 24:213-214, 1984
HM8855	89 PIIIA	Sherman(5) x HW79149
HM8887	88 PIIB	PMGTC2; Crop Sci. 24:213-214, 1984
HM8888	88 PIIB	HW79149 x HW79022
HM8890	89 PIIIA, 90 III	A8 x (Asgrow A3127(4) x L24)
HM8894	89 PIIIA	A80-244036 x (Asgrow A3127(4) x L24)
HM8935	90 PIIA	Hobbit x Maple Arrow
HM8943	90 PIIA	Gnome x " "
HM8945	90 PIIA	Amcor x Zane
HM8947	90 PIIA	Hack x Century 84
HM8948	90 PIIA	Asgrow A1937 x Asgrow A3127
HM8977	90 PIIIA	PMGTC3 (Cycle 3); Crop Sci. 24:213-214, 1984
HM8998	90 PIIB	A79-136012 x Asgrow A3127
HS82-5930	84 PIIB	Cumberland x PI 391.583(Jilin No. 10)
HS84-3729	87 PIIIA	Asgrow A3127 x Schechinger S48
-3741	87 PIV	" " x " "
-6224	87 PIIA, 88 II	HW79015(2) x HW79149
-6247	87 PIIA, 88-89 II	Zane(3) x HW79149
HS85-5719	87 PIIIA	Harper x Zane
HS86-7619	89 PIIA	L76-0474 x A78-123018
HS87-2061	89 PIIIA	Sherman x Madison GL2810
-2064	89 PIIIA	" x " "
-2067	89 PIIIA, 90 III	" x " "
-4017	89 PIIA	Century 84 x HW8008
-4020	89 PIIA	" " x "
-4087	89 PIIA, 90 II	A81-156027 x (Asgrow A3127(4) x Williams 82)
HS88-4905	90 PIIA	Conrad x Hayes
-4906	90 PIIA	" x "
-4908	90 PIIA	" x "
-4909	90 PIIA	" x "
-4912	90 PIIB	Winchester x A83-271027
-4913	90 PIIB	" x "
-4918	90 PIIA	Asgrow A2943 x A83-271027
-4970	90 PIIB	" " x "
-4988	90 PIIB	Winchester x "
HW73-336	77 PIII	L67-533 x L66L-140
HW74-618	= Gnome (1979)	Williams x Ransom
-678	77 PIV	Amsoy 71 x "
-3354	77 PIII	Williams x "
-3362	77 PIII	" x "

HW74-3365	77 PIV	Williams x Ransom
-3366	77 PIV	" x "
-3375	77 PIV	" x "
-3384	= Sprite (1980)	" x "
-3385	= Hobbit (1981)	" x "
-3386	77 PIV	" x "
-3394	77 PIII	" x "
-3400	77 PIII	" x "
HW75-3025	77 PII	Amsoy 71 x PI 227.334
-3080	77 PI	Beeson x "
HW6942-15-6	77 PII, 78 II	Calland x Beeson
HW6984-20-6	77 PII	Cutler x "
HW7501	77 PIII	Harosoy x Higan
HW7847	79 PIII	Evans x Williams
HW7867	79 PIII	IVR 4311 x C1483
HW79015	80 PII, 81-83 III	A72-512 x Oakland
HW79022	80 PII	Woodworth x L60-347-1-60-2B
HW79050	80 PIII	Cumberland x Pella
HW79054	80 PII, 81 III	" x "
HW79116	80 PIII	" x "
HW79149	80 PIII, 81-82 III	* (A72-507(6) x A1, <u>Rps1-c</u> ) x (A72-507(5) x PI 82.263-2, <u>Rps</u> ); A72-507BC subline
HW8008	81 PIIA, 82-83 II	L69U40-16-4 x Century
HW8028	81 PIIA	A75-105021 x "
HW8033	= Zane (1984)	Cumberland x Pella
HW8039	81 PIIA, 82-83 II	Weber x Pella
HW8067	= Sherman (1985)	A72-512 x "
HW8071	81 PIIIB	Cumberland x Pella
HW8121	82 PIIB	Century x Pella
HW8122	82 PIIB	A76-202015 x A76-304005
HW8123	82 PIIB	" x "
HW8124	82 PIIB	Pride B216 x Century
HW8125	82 PIIB	A76-202015 x A76-304005
HW8130	82 PIIIA, 83 III	Pella x A75-105021
HW8131	82 PIIIA	BSR 301 x Pella
HW8132	82 PIIIA	Century x "
HW8133	82 PIIIA	AX860-1 x Amcor
HW8134	82 PIIIA	Century x L69U40-16-4
HW8135	82 PIIIA	A76-202015 x Century
HW8136	82 PIIIA	Pride B216 x Pella
HW8137	82 PIIIA	" " x A72-512
HW8141	82 PIV	BSR 301 x Pella
HW8142	82 PIV	Cumberland x A76-304005
HW8143	82 PIV	" x Pfizer CX276
HW8185	= Century 84 (1984)	Century(5) x Williams 82(L24), <u>Rps1-k</u>
HW8185-6	84 PIIB	" " x " " "
HW8221	83 PIIB, 84 II	A76-202015 x (Tracy x Williams)
HW8222	83 PIIB	A75-103019 x A76-202015

HW8223	83 PIIB, 84-85 II	* (Cumberland x Century) x (A76-202015 x A76-304005)
HW8224	83 PIIB	AX860-1 x Amcor
HW8225	83 PIIB, 84 II	Hobbit EMS isoline mutant
HW8231	83 PIIIB	A76-202015 x A76-304020
HW8232	83 PIIIB	(Soysota x PI 85.505) x A76-304020
HW8233	83 PIIIB, 84 III	(Pella x Cumberland) x (Tracy x Williams)
HW8234	83 PIIIB	" x " x " x "
HW8235	83 PIIIB, 84 III	Century x (Tracy x Williams)
HW8236	83 PIIIA, 84 III	Hobbit EMS isoline mutant
HW8241	83 PIV, 84 III	Century x (Tracy x Williams)
HW8242	83 PIV	Hobbit EMS isoline mutant
HW8366	84 PIIIB	(Pride B216 x NK S1492) x (Pride B216 x Pella)
HW8371	84 PIIIB, 85 III	HW79149 x Williams 79
HW8372	84 PIVB	Pride B216 x K9
HX77-93	63 PI	Monroe x Richland
-208	63 PI	" x "
HX176-2-8	76 PII	CX198-H38 x CX282-H14

#### K: Kansas A.E.S.

##### Year-Line Numbers:

K62-7201	64 PIII	C1069 x Chippewa
-7221	=Columbus (1971)	" x Clark
K81-21-51	88 PIIIA	Cumberland x DeSoto
-21-155	88 PIVA	" x "
-21-222	88 PIIIA	" x "
K82-1-9	88 PIIIA	Asgrow A4268 x Asgrow A3127
-1-48	88 PIVA, 89-90 IV	" " x " "
-1-92	88 PIVA	" " x " "
-1-93	88 PIIIA	" " x " "
-1-138	88 PIVA, 89 IV	" " x " "
-1-201	88 PIVA	" " x " "
-1-210	88 PIVA	" " x " "

##### Serial Numbers:

K645	61 PIV	unknown, records destroyed by fire
K646	61 PIV, 62-63 IV	" " " " "
K653	61 PIV	" " " " "
K678	61 PIV	" " " " "
K701	61 PIV, 62 IV	" " " " "
K720	64 PIV	" " " " "
K1001	72 PIV	Wayne x C1317-71
K1002	72 PIV	" x "
K1003	72 PIV, 73 IV	C1266 x C1264
K1004	= Pomona (1974)	" x C1265
K1005	72 PIV	Cutler x CX405B

K1006	72 PIV	Cutler x CX405B
K1007	72 PIV, 73 IV	Bonus x Cutler
K1008	73 PIV	C1264(2) x Wayne
K1009	73 PIV	C1317-71 x Amsoy
K1010	73 PIV	" x CX363(Kent(8) x Mukden, <u>Rps1</u> )
K1011	74 PIV	Cutler x "
K1012	74 PIV	" x "
K1013	74 PIV	" x "
K1014	74 PIV	" x "
K1015	74 PIV	" x "
K1016	75 PIV	Williams x Columbus
K1017	75 PIV	L66L-140 x "
K1018	75 PIV	" x "
K1019	= Crawford (1977)	Williams x Columbus
K1020	76 PIV	" x "
K1021	76 PIV	" x "
K1022	76 PIV, 77 IV	" x "
K1023	76 PIV	L15 x C1476
K1024	= DeSoto (1979)	L66L-140 x Columbus
K1026	76 PIV	Williams x "
K1027	76 PIV	" x "
K1028	76 PIII, 77 III	" x Calland
K1029	77 PIII	Adelphia x Cutler
K1030	77 PIII	Williams x Calland
K1031	77 PIV	" x "
K1032	77 PIV	" x "
K1033	= Douglas (1980)	" x "
K1034	77 PIV	" x "
K1035	77 PIV, 78 IV	" x "
K1036	77 PIV, 78 IV	" x "
K1037	78 PIV	" x Bonus
K1038	78 PIV	" x Cutler 71
K1039	78 PIII	L66L-144 x Calland
K1040	78 PIV	L66-1359 x "
K1041	= Sparks (1981)	Williams x "
K1042	78 PIV, 79 IV	L66L-140 x Cutler 71
K1043	79 PIV	Tracy x Williams
K1044	79 PIV, 80-81 IV	" x "
K1045	79 PIV, 80 IV	" x "
K1046	79 PIV, 80 IV	" x "
K1047	79 PIII	" x Bonus
K1048	79 PIV	" x "
K1049	79 PIV	" x K1003
K1051	79 PIV	" x Williams
K1055	80 PIII	" x "
K1056	80 PIII	" x "
K1057	80 PIII	" x Columbus
K1058	80 PIII, 81-82 IV	" x Bonus
K1059	80 PIII	" x Columbus
K1060	80 PIII	" x Pomona

K1061	80 PIV, 81 IV	Tracy x Columbus
K1062	80 PIV, 81 IV	" x Williams
K1063	80 PIV	" x "
K1066	80 PIV	" x Pomona
K1067	80 PIV	K1001 x Bonus
K1070	81 PIIIB	Tracy x "
K1071	81 PIIIB	Union x C1528
K1072	81 PIIIB	" x K1028
K1073	81 PIIIB	" x "
K1074	81 PIIIB, 82 III	Tracy x Williams
K1075	81 PIV, 82 IV	" x Bonus
K1076	81 PIV, 82 IV	" x Williams
K1077	81 PIV	" x "
K1078	81 PIV	L70T-543G x K1028
K1079	81 PIV	Tracy x Williams
K1080	81 PIV	" x Bonus
K1086	82 PIIIB	Union x DeSoto
K1087	82 PIIIB	" x "
K1088	82 PIIIB	" x "
K1089	82 PIV	(Tracy x Columbus) x (Williams x Calland)
K1090	82 PIV	Union x Essex
K1095	83 PIV	K1034 x "
K1096	83 PIV	" x Columbus
K1105	84 PIIIA	(Tracy x Williams) x Pella
K1106	84 PIVB, 85-86 IV	(Williams x Calland) x Essex
K1107	84 PIVB	(Williams x Columbus) x "
K1108	84 PIVB	Will x (Williams x Calland)
K1109	84 PIVB	(Tracy x Williams) x DeSoto
K1110	84 PIVB	(Williams x Calland) x Pella
K1116	85 PIIIA	L73-6084 x Crawford
K1117	85 PIVB	Hobbit x K74-115-76-754
K1118	85 PIVB	Douglas x Century
K1119	= KS4390 (1986)	K1022 x Essex
K1125	86 PIVA	Sparks x Forrest
K1126	86 PIVA, 87 IV	* HW7847 x "
K1127	86 PIVA	* " x "
K1139	87 PIIIA	K1062 x A79-334010
K1140	87 PIIIA	" x S76-2203
K1141	87 PIIIA	" x A79-334010
K1142	87 PIIIA	" x "
K1143	87 PIIIA	" x "
K1144	87 PIV, 88 IV	" x S76-2203
K1145	87 PIV, 88-89 IV	Essex x Cumberland
K1146	87 PIV, 88 IV	" x K1062
K1147	87 PIV	" x Cumberland
K1148	87 PIV, 88-89 IV	" x "
K1149	87 PIV	Forrest x "
K1160	89 PIIIA	A80-147002 x Asgrow A3127
K1161	89 PIIIA, 90 III	Harper x Asgrow A3127
K1162	89 PIIIA	HW79149 x Asgrow A3127

K1163	89 PIIIA	HW79149 x Asgrow A3127
K1164	89 PIIIA, 90 III	Harper x Asgrow A3127
K1165	89 PIVA	" x " "
K1166	89 PIVA, 90 IV	" x " "
K1167	89 PIVA	" x " "
K1168	89 PIVA	" x " "
K1169	89 PIVA, 90 IV	" x " "
K1170	89 PIVA	" x " "
K1180	90 PIIIA	Sherman x C1623
K1181	90 PIIIA	" x Harper
K1182	90 PIIIA	" x "
K1183	90 PIIIA	" x Asgrow A3659
K1184	90 PIIIA	" x Harper
K1185	90 PIIIA	" x "
K1186	90 PIVB	Elgin x Asgrow A3659
K1187	90 PIVB	Toano x " "
K1188	90 PIVB	Sherman x K1103
K1189	90 PIVB	Elgin x Asgrow A3659
K1190	90 PIVB	Toano x " "
K1191	90 PIVB	Sherman x Toano

Ky: Kentucky A.E.S.

Ky75-101-18	79 PIV	* <u>Wye</u> x Cutler 71
-146-74	79 PIV, 80 IV	L66-1359 x Columbus
Ky78-405	80 PIV	EMS-treated Williams
-1214	80 PIV, 81-82 IV	" " "
Ky79-0237	= Pennyrile (1987)	Williams x Essex
-0840	82 PIV	A72-512 x "
-447	81 PIV	Williams x "
-1332	81 PIV	Essex x Wayne
Ky80-1027	83 PIV	Williams x Essex
-1030	83 PIV	" x "
-1154	83 PIV	" x "
Ky82-0865	85 PIVA	DeSoto x "
-0881	86 PIVA, 87 IV	" x "
-1313	86 PIVA	Douglas x Elf
-1475	86 PIVA	K1035 x Essex
-1482	86 PIVA, 87 IV	" x "
-1619	85 PIVA	Douglas x Elf
Ky84-0215	87 PIV	L73-318 x K1046
-0405	87 PIV	* <u>V76-595</u> x Cumberland
Ky85-1273	90 PIVB	Ripley x Pershing
-2094	90 PIVB	Sparks x Mitchell
-2118	90 PIVB	" x Essex
-10085	88 PIVA	Pennyrile x Harper
-10106	88 PIVA	" x "
-01115	88 PIVA	" x "
-09073	89 PIVB, 90 IV	Ripley x Pershing

L, LG, LL, LN, LX, (D on page 63); Illinois A.E.S.

Serial Numbers:

L1	Chippewa 64 (1964)	Chippewa(8) x Blackhawk, <u>Rps1</u>
L2	62-63 II	Harosoy 63, <u>Rps1</u> x L3, <u>rxp</u> ; from L2; reselected for yield
L2A	65-66 II	Harosoy(6) x S54-1207, <u>rxp</u>
L3	62 II	(C1128(6) x S54-1207, <u>rxp</u> ) x (C1128(6) x <u>H21162,Rps1</u> )
L4	62 III	Shelby(7) x L49-4091, <u>rxp</u>
L5	62 III	L8, <u>rxp</u> x L7, <u>Rps1</u> ; Clark- <u>Rps1</u> <u>rxp</u>
L6	62 IV	Clark(8) x Blackhawk, <u>Rps1</u>
L7	62 IV	" (6) x L49-4091, <u>rxp</u>
L8	62 IV	" (6) x Chief, <u>Np</u>
L9	65 IV	[Chippewa(8) x (C1128(2) x S54-1207, <u>rxp</u> )] x (Chippewa(10) x Blackhawk, <u>Rps1</u> )
L10	65 I	(Clark(6) x T201,I) x (Clark(6) x T145,r) L6 x L11; Clark-I r <u>Rps1</u> <u>rxp</u> from L12; reselected for yield
L11	65 IV	Wayne(6) x Clark 63, <u>Rps1</u>
L12	65 IV	(L10(6) x L62-1055,I) x (L10(6) x L62-1380,r) Williams(5) x SL12, <u>Rpm</u> <u>Rps1</u>
L12A	66 IV	" (6) x (Clark(6) x T117,Dt2)
L15	66 PIII, 67-68 III	" (6) x Lee 68, <u>Rps1-c</u>
L16	67 PI	" (7) x Kingwa, <u>Rps1-k</u>
L21	= Union (1977)	
L22	= Will (1979)	
L23	= Williams 79 (1979)	
L24A	= Williams 82 (1981)	

Note: L24 was a composite of 6 Phytophthora resistant F<sub>3</sub>BC<sub>6</sub> lines. L24A(Williams 82) is a composite of 4 of these 6 lines selected for similarity to Williams.

L25A	80-81 III	Williams(6) x PI 96.983, <u>Rsv1</u>
L26	80 III	" (7) x Harrel, <u>Rps1-b</u>
L27	80 II	Corsoy(8) x Kingwa, <u>Rps1-k</u>
L28	82 PIIB	Corsoy 79, <u>Rps1-c</u> x [Corsoy(6) x (Harosoy(5) x D54-2437, <u>Rps2</u> )]

Year-Line Numbers:

L34-12	42-43 III	from mixed hybrid population
-42	42-43 III	" " " "
-45	42-43 III	" " " "
-432	40-41 III	" " " "
-506	40-41 III	" " " "
L36-5	41 II	Mandarin x Manchu
-12	40-42 II, 42 III	" x "
-13	40-41 III	from mixed hybrid population
-23	40-41 III	" " " "
-553	40 II	Mandarin x Manch
-685	= Lincoln (1943)	" x "
-690	40-42 III	" x "
-700	41-42 II, 42 III	" x "
-720	41 II	" x "

L37-923	41-42 IV	from mixed hybrid population
-1087	41-42 III	Illini x T48; LX157
-1111	42-43 III	* " x "
-1160	41-42 IV	* " x "
-1280	42-43 III	unknown
-1355	39-41 IV, 40-42 III	rogue in PI 81.041
L43-1927	46 II	Mukden x Richland
-2010	47 PIV, 46-47 III, 48 IV	C167 x L37-1355
-2014	47 PIV	" x "
-2140	47 III	Chief x "
-2142	47 PIV	" x "
-2213	47 PIV	" x T117
-2259	47 PIV	" x Scioto
-2509	47 PIV	Richland x C171
-2692	46 III	Dunfield(2) x T117
-2904	47 PIV	Dunfield x "
-2921	47 PIV	" x "
-2926	47 PIV, 47 IV	" x "
-2991	47 PIV	" x Illini
-2993	47 PIV	" x "
-3088	47 PIV	" x Scioto
-3110	47 PIV	" x "
-3213	47 PIV	" x "
-3279	47 PIV	" x Manchuria 13177
-3313	47 PIV	" x " "
-3392	46 III	" x " "
-3427	47 PIV, 47-48 IV	Scioto x Mukden
-3516	47 PIV	Mandell x Dunfield
-3518	47 PIV	" x "
-6424	47 PIV	C171 x Chief
-6443	47 PIV	" x L37-1355
-6444	47 PIV	" x "
-6527	47 PIV	T117 x C171
-6532	47 PIV	" x "
-6552	47 PIV	" x "
-6587	47 PIV	Manchuria 13177 x L37-1355
-6640	47 PIV	Macoupin x Mt. Carmel
-6663	47 PIV	L37-1355 x Scioto
-6693	47 PIV	" x C167
-6715	47 PIV	" x C171
-6742	47 PIV	Chief x L37-1355
-6764	47 PIV	" x Dunfield
-6816	47 PIV	Patoka x "
-6823	47 PIV	" x "
-6893	47 PIV	Mt. Carmel x C171
-7437	46 II	Dunfield x Hudson Manchu
-7494	46 II	Seneca x Richland
-8417	46-47 II	Chief x "
-8642	46 II	Richland x Scioto

L44-6032	49 PIV	Chief(2) x Macoupin
-6238	48 PIV	L37-1355(2) x "
-6259	48 PIV	" " x Macoupin
-6271	49 PIV	" " x "
-6290	48 PIV	" " x "
-8015	47 PI	Chief x Richland
-8066	48 II	Seneca x L37-1355
-8090	48 II	" x Hudson Manchu
L46-1152	48-50 III	Lincoln(2) x Richland
-1503	48 PIII, 49 PIV, 49-50 III	" " x "
-1656	48 PIII, 49-51 IV	" " x "
-1744	48 PIII, 49 PIV	" " x "
-1776	48 PIII, 49 PIV	" " x "
-2132	48 PIII, 49-52 III, 51-52 IV	" " x " ; see L49-5138 to 5142
-2132-A1	55 PIII	" " x " ; Iowa selection
-A7	55 PIII	" " x " ; " "
-A14	55 PIII, 56 III, 56-57 IV	" " x " ; " "
-5002	48 PIV	C143 x Lincoln
-5605	48 PIII	Lincoln x Richland
-5658	48 PIV	" x "
-5679	48 PIV, 49-50 IV	" x "
-5680	48 PIV	" x "
-5683	48 PIV	" x "
-5698	49 PIV	" x "
-8091	48-49 PI	" (2) x "
-8144	48 PI, 48 II	Lincoln x "
-8148	48 PI	" x "
-8174	48-49 PI	" (2) x "
-8179	48 PI, 49-52 I	" " x "
-8182	48-49 II	" " x "
-8275	= Chippewa (1954)	" " x "
-8474	48 II	" " x "
-8477	49 II	" " x " ; from L44-1219
-8622	48 II	" " x "
L47-1287	49 II	" " x "
L48-7289	50-51 II	Seneca x Richland
-10755	50 PIV, 51 IV	Lincoln(2) x C171
-10778	50 PIV	" " x "
-10780	50 PIV, 51-52 IV	" " x "
-10879	50 PIV	" " x Chief
-10904	50 PIII	" " x Macoupin
-10934	50 PIII, 51 IV	" " x "
-10946	50 PIII, 51 III	" " x "
-10952	50 PIV	" " x "
-10970	50 PIII	" " x "
L49-3270	52-53 IV	" " x Richland

L49-4091	51 IV, 52-53 III	(F3 Linc.(2) x Richland) x (F1 Linc. x CNS)
-4196	51 IV	" " " " x " " "
-4197	51 III	" " " " x " " "
-5138	= Clark (1953)	Lincoln(2) x Richland; from L46-2132
-5139	= Shelby (1958)	" " x " ; " "
-5142	51 IV	" " x " ; " "
L54-1053	57 PII	Blackhawk x Capital
-1055	57 PII, 58 II	" x "
-1069	57 PI	" x Harly
-1109	57 PIII	PI 68.521 x L46-1152
-8054	57 PII	Blackhawk x Capital
L56-2081	61 PIV	Hawkeye x L46-1503
L57-2206	60 PIII	L49-4091 x Clark
-2222	= Wayne (1964)	" x "
-2228	59 PIII	" x "
-2276	60 PIII, 61 IV	" x "
-2322	59 PIV, 60 III	" x "
-2324	60 PIII, 61-62 IV	" x "
-2386	59 PIII	" x "
-2396	60 PIII, 61 III	" x "
-2505	59 PIII	" x Shelby
-2702	59 PII	Mukden x Richland
-2705	59 PII	" x "
-2883	59 PIII	L46-2132 x Adams
-2918	60 PII	Hawkeye x L48-7289
-2971	61 PIV	" x Perry
-2974	60 PIII	L48-7289 x Adams
-3033	61 PIII, 62 III	Adams x L46-1503
-3104	61 PIV, 62 IV	C985 x Perry
-3116	61 PIV	FC 33.243 x Perry
-9668	61 PIII	Hawkeye x Lee
-9691	61 PIII	" x "
-9775	61 PIII, 62 III	" x "
-9777	60 PIII, 61 III	" x "
-9809	60 PIV, 61 IV	" x "
-9819	60 PIV, 61 IV	" x "
-0005	59 PIII	L46-2132 x Adams
-0009	61 PIII	" x "
-0011	59 PIV	" x "
-0025	59 PIV	" x "
-0034	59 PIV, 60-62 IV	" x "
L58-272	59 PII	mutant to magenta flower color in Harosoy; T235
-1531R	60 II	T235, <u>wm</u> (2) x (Harosoy(5) x Blackhawk, <u>Rps1</u> )
L58g-1H	59 II	Harosoy(5) x Blackhawk, <u>Rps1</u>
-122R	60-61 PIV, 61 IV	Clark(5) x " "
L59g-1H	60 II	Harosoy(8) x " "
-1R	= Harosoy 63 (1963)	" " x " "
-2R	= Hawkeye 63 (1963)	Hawkeye(7) x Blackhawk, <u>Rps1</u>
-3R	60-62 II	Adams(7) x " "
L60-9H	61 PIV	Clark(8) x " "

L60-20	61 PI	Chippewa(6) x Blackhawk, <u>Rps1</u>
-283	61 PIV	Kent(4) x L49-4196, <u>r xp</u>
-1312	63 PIII, 64 III	Shelby x Clark
-1327	63 PIII	" x "
-1331	63 PIII	" x "
-1385	62 PIV, 63-64 IV	* <u>L46-1503 x C985</u>
L61-987	63 PIII	Harosoy(4) x PI 86.024
-1112	63 PIII, 64-65 III	Clark(3) x T117
-1884	63 PI	Lindarin(3) x L58-2080
L62-361	64 PII	Harosoy(6) x T117, <u>Dt2</u>
-1161	64 PIII	Clark(4) x " "
-1208	64 PIII	" (5) x " "
-1251	64 PIV, 65 IV	" (6) x " "
-1579	64 PIV	" " x T204, <u>ln</u>
-1932	64 PII, 65 II	" " x PI 86.024, <u>e2</u>
L63-971	65 PI	Harosoy(6) x T139,early
-1397	65 PII, 66 II	" " x PI 80.837, <u>Dt2</u>
-3297	65 PIII	Clark(6) x PI 84.987, <u>dt1</u>
-0097-C3-1	69 PIV	" (2) x PI 84.946-2
-0113	66 PIV	" (4) x " BSR resistant
-0123	66 PIV	" " x " " "
-0123-C5-2	69-70 PIV	" " x " " "
L64-4149	67 PI	Harosoy(6) x T175,early
L65-1324	68 PII	Wayne(2) x L62-1926
-1342	68 PI, 69-70 I	" " x "
-1354	68 PII, 69 II	" " x "
-1376	68 PII	" " x "
-1385	68 PII	" " x "
L66-867	68 PI	(L10(6) x L62-1055,I) x (L10(6) x L62-1380,r)
-892	68 PI	" " " " x " " " " "
-932	68 PI	" " " " x " " " " "
-945	68 PIII	Wayne(5) x L63-3534,I r
-949	68 PIII	" " x " " "
-1359	69 PIV, 70-74 IV	Wayne x L57-0034
-1420	69 PIII	" x L57-9819
-1448	69 PIV	Clark 63 x "
L66L-108	= Williams (1971)	Wayne x L57-0034
-137	69 PIII, 70 III	" x "
-140	68 PIII, 69-70 III	" x "
-144	69 PIV, 70-71 IV	" x "
-154	68 PIII, 69-70 III	" x "
-172	= Woodworth (1974)	" x "
-177	68 PIII, 69 III	" x L57-9819
-186	69 PIV	" x "
-191	69 PIV, 70 IV	" x "
-238	69 PIV	" x "
-257	69 PIV	Clark 63 x "
-262	69 PIV	" " x "
-263	69 PIII	" " x "
-276	69 PIV	" " x "

L66L-285	68 PIII	Clark 63 x L57-9819
-287	69 PIV	" " x "
-299	69 PIII	" " x "
-307	69 PIV	" " x "
-310	69 PIV	" " x "
-314	68 PIII	" " x "
-317	68 PIII	" " x "
-333	69 PIV, 70 IV	" " x "
-347	69 PIV	" " x "
L67-234	70 PII	Harosoy(6) x Higan, <u>S</u>
-248	70 PII	" " x " "
-533	70 PIII	Clark(6) x Higan, <u>S</u>
-592	70 PIV	" " x " "
-3542	69 PIII	L15, <u>Rps1</u> x (Wayne(4) x L11, <u>I r</u> ); Wayne- <u>I r</u> <u>Rps1</u>
-3544	69 PIII	" x " " x " " " "
-3550	69 PIII	" x " " x " " " "
-5816	70 PIII	* Clark 63 x L62-2328
-5860	70 PIII	* " " x "
-6301	69-70 PIV	Clark(6) x PI 84.946-2, BSR resistant
-6330	69 PIV	L6 x (Clark(5) x PI 84.946-2), BSR resistant
L67D-334	70 PII	Chippewa 64 x Corsoy
-423	70 PII	" " x "
-423-1	73 PII	" " x "
-612	70 PII	" " x "
-805	70 PI, 71 PII	Hark x Disoy
-939	70 PI	" x "
-942	70 PI, 71 PII	" x "
-944	70 PI, 71 PII	" x "
-950	70-71 PII	" x "
-1013	70 PII	" x "
-1030	70 PI	" x "
-1036	70 PI	" x "
-1220	70-71 PII	" x "
-1249	70 PII	" x "
-1803	70 PII	Provar x "
-1812	70 PII	" x "
L67U15-18-13	73 PIII	Chippewa 64 x Corsoy
L67U181-6-18	73 PIII	" " x "
L67U-312	70 PII	" " x "
-326	70 PII	" " x "
-440	70-71 PII, 72 III	" " x "
-1111	70-71 PII	Hark x Disoy
-1446	70 PII	Provar x Magna
-1546	70-71 PII	" x "
-1615	70-71 PIII	" x "
-1621	70 PIII	" x "
-1630	70-72 PIII	" x "
-1643	70 PII	" x "
-1806	70 PII	" x Disoy
-1827	70-71 PIII	" x "

L67U-1842	70-71 PII, 72 III	Provar x Disoy
L68-4241	70 PI, 71 I	L10(5) x S62X30:1, <u>I t wl Rpm</u> ; Chippewa 64- <u>I t wl Rpm</u>
-4242	70 PI	L10(5) x S62X30:1, <u>I t wl Rpm</u> ; Chippewa 64- <u>I t wl Rpm</u>
-0017	70 PII	Harosoy(2) x PI 84.946-2,BSR resistant
-0107	70 PII	" (4) x " " "
-0417	70 PIV	Clark(5) x PI 84.946-2,BSR resistant
-0423	70 PIV	" " x " " "
-0429	70 PII	" " x " " "
-0433	70 PIV	" " x " " "
L69-20	72 PIII, 73 III	Hark x Wayne
-5338	71 PIV	L12(6) x Hawkeye, <u>Im</u> ; Clark 63- <u>I r Im</u>
-5343	71 PIV	" " x " Clark 63- <u>I r Im</u>
-5366	71 PIV	" " x " , <u>Im i-i</u> ; Clark 63- <u>r Im</u>
L69D30-7-2	76 PI	Calland x A100
L69D100-16-2	75 PII	C1423 x Corsoy
-16-5	75 PII	" x "
L69D-124	72 PII	Chippewa 64 x Corsoy
-133	72 PII, 73 II	" " x "
-227	72 PII, 73 III	Hark x Disoy
L69L-208	72 PIV	L66-531 x L66-1322-1
L69U14-16-5	75 PIII	L15 x Corsoy
L69U16-15-2	74 PIII	" x Amsoy
L69U19-16-2	74 PIII, 75-77 III	" x Beeson
L69U37-17-5	74 PIII, 75-78 III	Calland x Corsoy
L69U40-16-4	76 PIII, 77 III	" x Amsoy
-19-1	74 PIII, 75-76 III	" x "
L69U63-6-3	75 PIV	L12A x Beeson
L69U72-3-4	74 PIII, 75 III	Cutler x A100
-3-6	75 PIII	" x "
-7-1	74 PIII	" x "
L69U74-2-1	74 PIV	" x Hark
L69U79-3-3	74 PIV	" x Corsoy
L69U84-5-4	74 PIII	" x Beeson
-19-1	75 PIV, 76 IV	" x "
L69U108-9-4	75 PIII	C1423 x Provar
L69U-116	73 PIII	Chippewa 64 x Corsoy
-182	72 PIII	" " x "
-188	72 PIII	" " x "
L69U2325-1-1	75 PII	Hark x Disoy
L70-522	73 PIII	R64-500 x L66-531
-548	73 PIII	" x "
-2345	74 PIII	SL6 x Custer
-2635	73 PII	L4 x SL5(Kent- <u>Rps1 rxp</u> )
-2768	73 PII	L15 x C1421(Adelphia- <u>Rps1</u> )
-2891	74 PII	" x Amsoy 71
-3127	74 PII	Corsoy x (L67-3542 x SL12)
-4170	72 PIV	L12 x (Clark 63(7) x Kanrich, <u>Rpm</u> ); = Clark 63- <u>Rpm</u>

L70-4180	72 PIV, 73-74 IV	L12 x (Clark 63(7) x Kanrich, <u>Rpm</u> ); = Clark 63- <u>Rpm</u>
L70D3-14	73 PII	L63-1212 x C1426
L70D6-11-3	74 PIII	" x "
-11-5	74 PIII, 75 III	" x "
-16	73 PII, 74-75 II	" x "
L70D9-4-5	75 PII	M59-120 x L15
L70D19-4	73 PI	C1426 x L62-361(Harosoy- <u>Dt2</u> )
-7	73 PII	" x "
L70D-1341	73 PII	Chippewa 64 x Corsoy
-1363	73 PII	" " x "
-1407	73 PII	" " x "
-2022	73 PII	Provar x Magna
L70L-2755	73 PIII	L15 x Delmar
-2887	73-74 PIV	" x D64-3077
-2912	73 PIV, 74-75 IV	" x "
-2947	73 PIV, 74 IV	L12 x "
-3048	74 PIV, 75-79 IV	L15 x D64-3146
-3077	74 PIV	L12 x "
-3175	73 PIV	Adelphia x D64-3146
-3205	74 PIV	L4 x SL5
L70T-543	73 PII, 74 III	L15 x Amsoy 71
-543G	75 III	from L70T-543
L70U30A-4-3	76 PIII	C1426 x L15
L70U35-4	73 PIII	Corsoy x L62-1251(Clark- <u>Dt2</u> )
L70U49-1-3	74 PIII	C1457 x L15
L70U-517	73 PIII	Chippewa 64 x Corsoy
-539	73 PIII	" " x "
-578	73 PIII	" " x "
-1409	73 PIII	" " x "
-2173	76 PIII	Provar x Disoy
L71-504	74 PIV	L67-3550(3) x Merit
L71-2003	74 PII	L16 x Custer
-2011	74 PII	" x "
-2033	74 PI	L4 x L2(Harosoy- <u>Rps1 rxp</u> )
-2071	74 PII, 75 II	Merit x SL12(Wayne-I r <u>Rpm Rps1</u> )
-2322	74 PII, 75 II	Beeson x "
-2340	74 PII	" x "
-2431	74 PII	Corsoy x "
-2435	74 PIII	" x "
-2855	74 PII, 75-76 II	Beeson x "
-2954	74 PIII	Corsoy x "
-3008	74 PIII	" x "
-3067	74 PIII	Cutler x "
L71D52-1	75 PII	L65-1324 x Cutler
-10	73 PII	" x "
L71L-59	74 PIII	L15 x Custer
-93	74 PIII	" x "
-282	74 PIII	SL6 x "
-458	74 PIII	L12 x "

L71L-506	74 PIV	L2 x SL12
-525	74 PIV	" "
-554	74 PIV, 75 IV	Cutler x SL12
-556	74 PIV, 75-76 IV	" x "
-1521	75 PIV	R62-659 x L62-535
L71U11-22	73 PIV	L66-531 x Amsoy 71
L71U17-22	73 PIV	" x C1426
L71U54-6	73 PIII	L65-1324 x SL5
L72-607	74 PI	SL7 x [L16 x (L10(2) x Merit, <u>Im</u> )]; Chippewa- <u>Im</u> <u>Rpm</u> <u>Rps1</u> <u>rxp</u>
-672	75 PIII	L67-3544(4) x Merit, <u>Im</u> ; Wayne-I r <u>Rps1</u> <u>Im</u>
-1369	75 PIII	SL12(6) x L62-1579, <u>ln</u> ; Wayne-I r <u>Rpm</u> <u>Rps1</u> <u>ln</u>
-1419	75 PIII	L15 x (Wayne(10) x Kanrich, <u>Rpm</u> ); Wayne- <u>Rpm</u> <u>Rps1</u>
-1424	75 PIII	* L15 x [(L15(5) x <u>L12,I</u> r) x (Wayne(10) x Kanrich, <u>Rpm</u> )]; Wayne-I r <u>Rpm</u> <u>Rps1</u>
-0010	75 PIII	(Clark(4) x PI 84.946-2) x SL12
L72A-14	74 PII, 75 II	Calland x Amsoy
-18	74 PII	" x "
-69	75 PIII	Cutler x Provar
-78	75 PIV	" x Beeson
-80	74 PIII	" x "
-89	74 PIV, 75 IV	" x "
L73-212	75 PIII	SL12(6) x Merit, <u>Im</u> ; Wayne-I r <u>Rpm</u> <u>Rps1</u> <u>Im</u>
-318	79 PIV, 80 IV	Williams(2) x L69-5343
-827	76 PIII	L6 x (L67-592 x L62-1251); Clark- <u>Rps1</u> <u>rxp</u> <u>Dt2</u> S
-4124	75 PIV, 76 IV	D66-12392 x L69L-3
-4572	76 PII	Corsoy x C1476
-4673	78 PII, 79-80 II	" x L66L-154
-4679	77 PII	" x "
-4987	75 PIV	L66L-154 x Amsoy 71
-5038	76 PIV, 77 IV	L69-5347 x L66L-154
-5073	76 PIV	C1476 x "
-5875	77 PII	Beeson x Corsoy
-6084	76 PIII, 77-78 II	L15 x Amsoy 71
-6409	76 PII	SL6 x Custer
-7103	75 PIV	* L66-1322-1 x L66-2004
L73D-8	75 PI	Corsoy x M59-120
-76	76 PII	C1426 x C1477(Amsoy- <u>Rps1</u> )
-78	75 PII	M59-120 x L15
-80	75 PI	" x "
-195	= Amcor (1979)	Amsoy 71 x Corsoy
-253	75 PII	L65-1324 x Cutler
-261	75 PII	" x SL5
-296	75 PII	L67-533 x Corsoy
-308	75 PII	L65-1324 x C1457
L73U-55	75 PIII	Corsoy x L62-1251(Clark- <u>Dt2</u> )
-98	75 PIII	C1426 x L15
-115	75 PIII	Amsoy x L62-1251

L73U-117	76 PIII	Amsoy x L62-1251
-163	75 PII	Corsoy x "
-185	75 PIII	L67-533 x Calland
-332	75 PIII, 76 III	" x L66L-154
-338	75 PIII	" x L66L-140
-352	76 PIII	" x "
L74-1960	76 PIII, 77 III	L12 x D64-3077
-1968	76 PIV	" x "
-3157	77 PII	Steele x Williams
-3224	77 PII	" x "
-3516	77 PII	Williams x L67-1250
-3534	78 PIII	" x "
-3682	77 PIV	" x Beeson
-3735	77 PIV	" x "
-3897	78 PI, 79 I	" x "
-4043	77 PIV	" x "
-4093	77 PIII	" x "
-4261	77 PIV	" x "
-4372	77 PIV	" x "
-8350	77 PIV	" x "
L74D-609	= Pixie (1980)	" x Ransom
-611	= Elf (1977)	" x "
-615	76 PIII, 77 III	" x "
-618	= HW74-618 (Gnome)	" x "
-619	76 PIII, 77 III	" x "
-634	76 PIV, 77-78 IV	" x "
-670	76 PII	Amsoy 71 x "
-673	76 PIII	" " x "
-674	76 PIV, 77-78 IV	" " x "
-679	76 PII	" " x "
-911	76 PIII	" " x "
-914	76 PIV	" " x "
L74L-55	79 PIV	Calland x Williams
-71	77 PIII, 78-79 III	" x "
-116	78 PIV	" x "
-125	= Lawrence (1981)	" x "
-132	77 PIV	" x "
-228	77 PIV, 78 IV	L68-4096 x "
-358	79 PIV, 80 IV	" x L66L-177
-497	78 PIV, 79 IV	L66-945 x Coker Hampton 266A
L74U-3242	76 PIII, 77 III	Wells x York
L75-3632	78 PI, 79 I	Corsoy(6) x Lee 68, <u>Rps1-c</u> , early
-3674	= Corsoy 79 (1979)	" " x " "
-6857	77 PIII, 78 III	Williams(6) x L69-5343, <u>Im</u>
-8004	79 PIV	Williams x L70-2283
-8013	79 PIV	" x "
-8033	79 PII	" x "
-8064	78 PIV	" x "
-8073	78 PIV	" x "
-8121	79 PIII, 80 III	" x "

L75-8209	79 PIII	Williams x L70-2450
-8221	78 PIII	" x "
-8234	78 PIII	" x "
-8291	78 PIII	" x "
-8366	78 PIV	" x "
-8381	78 PIV, 79 IV	" x "
-8388	78 PIII, 79 III	" x "
-8460	79 PII	Beeson x L70-2450
-9162	78 PI	Amsoy 71 x L67-1250
-9164	78 PI	" " x "
-10513	79 PII	Beeson x (L70-6494 x Wells)
-11730	79 PIV	L70-6494 x Williams
-11806	79 PIV	" x "
-12050	79 PIII	Wells x Williams
-12061	79 PIII	" x "
-12341	79 PIII	" x "
-12386	79 PIII	" x "
-12593	79 PIV	Bonus x "
L76-129	78-79 PII	Beeson x L70-2283
-129B	= CN 290 (1983)	" x "
-136	79 PII	" x "
-140	79 PII	" x "
-141	78-79 PII	" x "
-141B	= CN 210 (1983)	" x "
-187	79 PI	" x L70-2450
-4026	81 PIV	Williams(2) x Raiden(PI 360.844)
-4050	81 PIV	" " x " "
-0022	78 PIII	Williams(4) x PI 171.451(Beetle resistant)
L77-176	79 PII	Williams x L70-2283
-178	79 PIII	" x "
-443	80 PIII	Union x L75-8020
-468	81 PIIIB	" x "
-515	80 PIV, 81 IV	" x "
-542	81 PIIIB	* " x L75-8211
-546	80 PIV	* " x " —
-565	81 PIIIB	* " x " —
-994	80 III	Williams(2) x PI 88.788; progenitor of Cartter and Fayette
-3014	80 PIII	L73-6626 x Williams
-8039	81 PIV, 82 IV	Williams x Mitchell
-8043	80 PIV, 81 IV	" x "
-8079	80 PIV	" x "
-8106	81 PIIIB	" x "
-8290	80 PIV, 82 IV	" x "
L78-709	80 PIII	" x L70-2283
-1418	81 PIIIB	" (2) x PI 88.788
-1444	= Fayette (1981)	" " x " ; L77-994 subline
-1491	81 PIIIB, 82-83 II	" " x "
-1738	81 PIIIB, 82 II	L75-8016 x F5(Williams x PI 88.788)

L78-4883	80 PIII	L73-6626 x Williams
-8109	82 PIIIA	L73-4124 x Essex
-8138	81 PIV, 82 IV	" x Essex
-8202	81 PIIB	L73-6626 x Essex
-8237	81 PIV	" x Essex
-8716	81 PIIIA, 82-83 IV	L71-3628 x Elf
-9204	81 PIIB	L73-6626 x "
-9236	81 PIIIA	" x "
L78L-346	82 PIIIA	L71-3628 x Essex
-957	82 PIV	Essex x Elf
L79-3910	82 PIIIA, 83 III	Union x L75-8020
-3971	83 PIIIB	* " x L75- <u>8211</u>
-4340	82 PIIIA	" x L75-8020
L80-474	83 PIIIB	Williams x M69-45
-2316	82 PIIB	Beeson x L70-2283
-2351	82 PIIB	" x "
-2562	83 PIIA	Williams x "
-2847	83 PIIIB	Union x L75-8020
-3013	82 PIIIA	Williams(2) x PI 88.788
-3049	= Cartter (1986)	" " x " ; L77-994 subline
-3057	83 PIIIB	" " x " ; "
-3145	83 PIIIB	L75-8003 x F5(Williams x PI 88.788)
-3159	83 PIIIB	" x F5(Williams x PI 8.788)
-3778	83 PIIIB, 84 III	Williams(2) x Raiden(PI 360.844)
-4120	83 PIIA	Beeson(4) x L70-2283
-4122	83 PIIA	" " x "
-4131	83 PIIA	" " x "
-4217	83 PIIIB	Williams(2) x PI 88.788; L77-994 subline
-4323	82 PIIIA, 83-85 III	" " x " ; " "
-4349	82 PIIIA, 83 III	" " x " ; " "
L80L-567	83 PIV	Williams x Pomona
-643	83 PIV	" x "
L81L-97	84 PIVB, 85 IV	" x PI 181.550
L82-1196	84 PIIA	(Corsoy(6) x L70-6494, <u>Rps2</u> ) x [Corsoy(6) x (Wells x (Harosoy x Kingwa, <u>Rps1-k</u> ))]
-3713	84 PIIB	L73-6626 x Williams
-3813	84 PIIB	" x Elf
-4050	87 PIIIB, 88 III	L71-3628 x Elf
L83-2334	87 PIIIB	Williams 82 x L76-0038
-2367	87 PIIIB	" " x "
-3261	86 PIIIB	Will x L74-4611
-3804	= Spry (1991)	L78-8694 x L78L-449
-3819	86 PIVB, 87-88 III	" x "
-3861	86 PIIIB	* " x "
-3933	87 PIV	" x L78L-688
-3942	87 PIIIB, 88 III	" x "
-3968	86 PIIIB	" x L78-9069
-3985	87 PIIIB	" x "
-7083	86 PIIIB	L78-4094 x L78-4245
-7375	87 PIIB	L73-4673 x L78-4054

L83-7421	86 PIIIB	L73-4673 x L78-4094
-7529	87 PIIIB	" x "
-7573	86 PIIIB, 87-88 III	" x "
-8567	86 PIVB	Williams 82 x L78-4245
L84-3566	87 PIIIB	Jin Shen Chi(PI 407.718) x Gnome
-5583	87 PIIB	L73-4673 x L78-4054
-5989	90 PIVA	Williams 82 x L78-4054
-6089	90 PIVA	" " x L78-4094
-6112	90 PIIIA	" " x "
-6186	90 PIIIA	" " x L78-4245
-6189	87 PIIIB, 88 III	" " x "
LG80-751	83 PIIIB	Williams x Essex
-754	83 PIV	" x "
LL86-1615	89 PIIB	Williams 79 x PI 486.355

Serial Numbers:

LN1053	80 PIV, 81 IV	Tracy x Pomona
LN1057	80 PIV	Williams x D60-9647
LN1058	80 PIV	Tracy x Columbus
LN1059	80 PIV, 81 IV	Williams x D60-9647
LN1060	80 PIII	Tracy x Williams
LN1062	80 PIII	" x "
LN1063	80 PIII	" x Bonus
LN1064	81 PIIIB	" x Williams
LN1065	81 PIIIB	" x Pomona
LN1066	81 PIV	* Williams x L70D6-16
LN1067	81 PIV, 82 IV	Tracy x Williams
LN1068	81 PIV	" x "

Year-Line Numbers:

LN78-246	80 PIII	Union x C1528
-257	81 PIIIB	" x "
-537	80 PIII	" x K1028
-575	80 PIII, 81 III	" x "
-896	81 PIIB, 82 I	L70T-543G x C1528
-1136	= Hack (1984)	" x K1028
-1627	81 PIV	L70L-2912 x C1520
-2678	81 PIIB	Evans x K1028
LN80-435	84 PIVB	K74-104-75-85 x L74D-674
-506	84 PIVB	" x K1028
-703	84 PIVB	K74-115-75-405 x Pella
-1563	83 PIIIA	* K74-114-75-000 x L74D-674
-1782	84 PIVB	Will x K74-115-75-376
-2096	83 PIV	BSR 301 x K74-108-75-169
-3466	83 PIIA	A76-201009 x HW6942-15-6
-5040	83 PIIA	Schechinger S48 x HW6942-15-6
-5043	83 PIIA	" " x "
-5689	83 PIIA	Pfizer CX290 x HW6942-15-6
-6084	83 PIIA	A2 x HW6942-15-6
-6176	83 PIIA	" x A75-305022

LN80-6736	84 PIIIA	A76-202015 x Land O Lakes Max
-6797	84 PIIIA, 85 III	" x " "
-6804	82 PIV	" x " "
-7319	82 PIV	A76-304020 x Asgrow A2656
-7532	83 PIIA, 84 II	Century x A76-304020
-7579	83 PIIA	" x "
-7603	84 PIIA	" x "
-7787	83 PIV	" x "
-8184	82 PIV, 83-84 IV	A76-304020 x Century
-8234	83 PIIIB	" x Land O Lakes Max
-8259	83 PIIIB, 84 III	" x " "
-8268	83 PIIIB	" x " "
-8290	83 PIIIB	" x " "
-8357	83 PIV	" x " "
-8478	= Chamberlain (1986)	" x " "
-8542	82 PIIIB	" x " "
-8653	83 PIIIB, 84 III	Schechinger S48 x A76-304020
-8659	83 PIV, 84 III	" " x "
-9140	82 PIIIB	Century x Asgrow A2656
-9359	82 PIIIB, 83 II	Weber x A76-202015
-9372	82 PIIIB	" x "
-9419	82 PIIIB, 83 II	" x "
-9604	83 PIV	A76-304020 x A75-103019
-9706	83 PIIIB	Hardin x A76-304020
-9709	83 PIIIB	" x "
-9714	83 PIIIB	" x "
-9729	84 PIIA	" x "
-10364	84 PIIB	Century x Land O Lakes Max
-10398	83 PIIA	" x " "
-10508	84 PIIB, 85 II	" x " "
-10805	82 PIIB	Asgrow A2656 x Schechinger S48
-11155	83 PIIIB	A76-202015 x A76-304020
-11550	83 PIIA	Century x A75-103019
-13299	83 PIV	K74-104-75-85 x Elf
-14346	83 PIIIA	BSR 301 x K1028
-14949	82 PIIIB	K1030 x "
-14950	82 PIIIB	" x "
-15170	84 PIVA	K1034 x Essex
-15885	84 PIVA	Union x C1520
-16017	84 PIVA, 85 III	Tracy x Williams
LN81-433	84 PIIB	K74-115-75-405 x L69U40-16-4
-1029	84 PIIB, 85 II	K74-114-75-000 x Pella
-1044	84 PIIIA, 85 II	" x "
-2090	84 PIIB	" x K1029
-2175	84 PIIIB	Will x K74-115-75-376
-2369	84 PIIIA	" x K1028
-2386	84 PIIIA	" x "
-2686	84 PIVA	BSR 301 x Pella
-2934	84 PIVA	K1030 x "
-3027	84 PIIIA	" x K1028

LN81-4098	84 PIIIB	L74-01 x Beeson
LN82-296	85 PIIA	Sparks x Century
-407	86 PIIA	" x "
-477	85 IIIIB	" x "
-589	86 IIIIA	" x U37219
-699	86 IIIIA	" x "
-1482	86 PIVA	K1042 x Century
-2366	= Hamilton (1989)	Sprite x L75-3632
-2688	86 PIVB	" x "
-3199	85 IIIIB	Williams 82 x Hardin
-3243	85 PIVA	" " x "
-3254	86 PIIA, 87 II	" " x "
-3480	86 PIIA	" " x "
-4049	85 PIVA	" " x L73-4673
-4055	85 PIIA	" " x "
-4433	85 PIVA, 86 IV	" " x Century
-4624	86 PIIA	" " x L73-4673
-4762	86 PIIA	" " x "
-4853	86 PIIA	" " x "
-4858	85 PIIA	" " x "
-5154	85 IIIIB	" " x U37219
-6159	85 IIIIB	K74-104-76-205 x Century
-6400	85 IIIIB	" x L73-4673
-7866	85 PIVA	K1056 x L75-3632
-8596	85 PIIA	" x L73-4673
-8699	86 PIVA	" x "
-8865	86 IIIIA	K1056 x L73-4673
-9535	85 PIIA	K74-113-76-486 x Century
-9648	=Burlison (1988)	" x "
-9710	85 PIVA	" x "
-9950	85 PIIA	" x L73-4673
-10484	85 PIIA	Sparks x Dawson
LN83-467	86 PIVA	BSR 201 x HC76-4030
-865	86 PIIA	" " x LN78-537
-1197	86 PIVB	A78-125029 x HC76-4030
-1338	86 PIIA	" x "
-1397	86 PIIA	" x "
-1709	86 IIIIA, 87 III	Hobbit x L27
-2324	86 PIVA	LN78-2714 x HC76-4030
-2356	= LN83-2356 (1988)	" x "
-2840	86 IIIIA	LN78-2123 x HC76-4030
-3824-1	= Jack (1989)	Fayette x Hardin
-5068	86 IIIIA	C1573 x Dawson
-7006	86 IIIIA	Sprite x Century
-7132	86 IIIIA	" x "
-7428	86 IIIIA	Douglas x Hardin
LN84-452	87 PIV, 88-89 IV	A78-227015 x Asgrow A3127
-978	88 PIVA, 89 IV	" x " "
-1304	88 PIVA, 89 IV	" x " "
-2068	88 PIVA	A78-236003 x Asgrow A3127

LN84-2418	88 PIIIA, 89 III	A78-227015 x Asgrow A3127
-3321	88 PIIIA, 89 III	HW79149 x HW79015
-3542	88 PIIIA	" x "
-3897	87 PIIIA	* " x <u>Harper</u>
-3945	87 PIV	" x "
-4037	87 PIV, 88 IV	" x "
-4082	87 PIV, 88 IV	" x "
-4109	87 PIIIA	" x "
-4332	87 PIIIA, 88 III	" x "
-4903	87 PIIIA	" x Asgrow A3127
-4940	89 PIIIA	" x "
-5430	87 PIIIA	" x Cumberland
-7254	88 PIIA	Hack x Elgin
-7414	88 PIIIA	" x "
-7513	87 PIIA	" x "
-7577	87 PIIIA, 88 III	" x HW79015
-7820	88 PIIIA	" x "
-8147	88 PIIA, 89 II	" x Harper
-8339	87 PIIA, 89 PIIB	" x "
-8397	89 PIVA	" x HW79015
-8527	87 PIIA, 88 II	" x Harper
-8563	87 PIV	" x "
-8588	87 PIIA, 89 PIIB, 90 II	" x "
-9050	87 PIIA	" x A79-334010
-9583	87 PIV, 88 IV	" x Cumberland
-9812	89 PIIIA	Williams 82 x LN80-11178
-10342	88 PIIA	" " x LN80-8309
-10413	87 PIIA	" " x "
-10573	87 PIIA	" " x "
-11018	87 PIV	" " x "
-11023	87 PIIIA	" " x "
-11185	87 PIIA	" " x "
-11299	88 PIIIA	" " x "
-13367	87 PIIA	NK S1492 x Harper
-13380	88 PIVA	NK S1492 x Asgrow A3127
-13426	87 PIV	" " x Harper
-14484	88 PIVA	" " x "
-15293	87 PIIIA	LN80-9447 x Asgrow A3127
-15336	87 PIIIA, 88 III	" x " "
-15424	88 PIVA	" x " "
-15496	88 PIVA, 89 IV	" x " "
-15502	88 PIIIA	" x " "
-15544	88 PIIIA	" x " "
-15574	87 PIIA, 88 II	" x " "
-17209	87 PIIIA	" x LN80-8309
-18266	87 PIIIA, 88-89 III	LN80-9452 x Asgrow A3127
-18282	87 PIIIA	" x " "
-18302	87 PIIIA	" x " "
-18924	88 PIVA	" x " "
-19128	88 PIVA	" x " "

LN84-19202	88 PIVA	LN80-9452 x Asgrow A3127
-19560	87 PIIA, 88 III	" " "
-20654	87 PIIA	Hack x LN80-8309
-21154	87 PIIA	" x "
-21610	87 PIV	" x Asgrow A3127
-21627	87 PIIIA	" x " "
-21732	87 PIIA	" x " "
LN85-874	= Bell (1989)	Fayette x LN80-10398
-2972	88 PIIIA	A8 x LN80-7532
-3036	88 PIIIA, 89 IV	" x "
-3114	88 PIIIA	" x "
-3402	88 PIIIA, 89 IV	" x LN80-10398
-5305	88 PIIA	LNX8107 x LN80-7532
-5352	89 PIIB	" x "
-5735	89 PIIIA	" x "
-6037	88 PIIA	" x "
-6065	89 PIIIA	" x "
-6210	88 PI	LNX8132 x A80-244003
-6226	88 PIIA	" x "
-6253	88 PIIA, 89 II	" x "
-6259	88 PIIA	" x "
-6347	88 PIIA	" x "
-6377	88 PIIA, 89 II	" x "
-6479	88 PIIA	" x "
-6747	89 PIIB	" x LN80-7532
-6800	89 PIIB, 90 II	" x "
-7289	88 PIIA	LNX8138 x A80-244003
-7295	88 PIIA	" x "
-7317	88 PI, 90 PIIA	" x "
-7355	89 PIIB	" x "
-7389	88 PIIIA	" x "
-7445	88 PIIA	" x "
-7755	88 PIIA	" x "
-7832	88 PIIA	" x "
-9180	89 PIIIA	LNX8141 x Fayette
-9245	89 PIIB	" x LN80-7532
-9442	89 PIIB	" x "
-9674	88 PIIA	" x "
-10234	88 PIIA, 89 II	LNX8179 x A80-244003
-10524	88 PI, 89 II	" x "
LN86-983	89 PIIB, 90 II	Hack x BRS 101
-1073	89 PIIB	" x A80-244036
-1088	89 PIIB, 90 III	" x "
-1105	89 PIIB	" x "
-1167	90 PIIA	" x "
-1227	89 PIIIA	" x Preston
-1244	89 PIIIA	" x "
-1285	90 PIIA	" x "
-1317	89 PIIIA	" x "
-1578	89 PIIB	" x PI 437.833

LN86-1735	89 PIIB	PI 437.833 x A80-244036
-2615	89 PIVA	Hack x Lakota
-3263	89 PIIIA	LN78-257 x Harper
-3357	90 PIIIA	" x Asgrow A3127
-3385	89 PIVA	" x " "
-3545	89 PIVA	" x " "
-3567	89 PIIIA	" x " "
-3585	89 PIVA	" x " "
-3626	89 PIVA	" x " "
LN87-1065	90 PIIA	A8 x Zane
-1455	90 PIVA	A80-346029 x LN80-7532
-1456	90 PIIIA	" x "
-1478	90 PIVA	" x "
-1672	90 PIIA	Sherman x LN80-9729
-1744	90 PIIIA	" x "
-2265	90 PIIIA	" x A8
-2305	90 PIIIA	" x "
-3257	90 PIIA	LNX8115 x A80-244003
-3574	90 PIIA	" x "
-3600	90 PIIA	" x "
-3684	90 PIIIA	" x A8
-4314	90 PIIA	LNX8179 x LN80-10398
-4663	90 PIIA	" x "

LX579-93            47 III            Chief x Dunfield

D from Dekalb, Ill., by C. M. Woodworth, Illinois A.E.S.

D-1	39-40 II	unknown (see H1)
D-8	39 II	"
D-10	39-40 II	"
D-12	39 II	"

LS: Southern Illinois University	
LS78-229	80 PIV
-335	80 PIV
-344	80 PIV
LS78W-110	=Pyramid (1985)
-724-1	82 PIV
LS79-E815	83 PIV
-W1308	83 PIV
-W2034	83 PIV
LS80-6358	84 PIVA
-6521	84 PIVA, 85-87 IV
-W6714	86 PIVA
-W6863	87 PIV
LS81-25	84 PIVA
-A5607	85 PIVA
-A5651	86 PIVA
-A6003	86 PIVA
-B1818	85 PIVA
-B1914	85 PIVA
-B2007	85 PIVA
-E695	85 PIIIB
-Ora616	85 PIVA
-Ora729	86 PIVA
LS82-A3223	86 PIVA
-1510	88 PIVB
-A3510	87 PIV
-B2745	87 PIV
-E1804	87 PIV
-E3079	87 PIV
LS83-519	88 PIVB
-5616	= Nile (1991)
LS84-920	88 PIVB
-2046	89 PIVA
-2643	88 PIVB
-4208	89 PIVA
-4220	88 PIVB
-4419	89 PIVA
LS85-4924	89 PIVA
-5031	89 PIVA
-7707	90 PIVA
LS86-0662	89 PIVA
LS87-1257	90 PIVA
-1311	90 PIVA
-1422	90 PIVA
-1615	90 PIVA
-1638	90 PIVA
-1907	90 PIVA
-2154	90 PIVA
-0626	90 PIVA
	* <u>Franklin</u> x J74-5
	* " x "
	* " x "
	" x "
	" x "
	* " (L73-6 <u>536</u> ) x Mitchell
	" x J74-5
	" x "
	* " (L73-6 <u>536</u> ) x Pixie
	* " " — x "
	" " x "
	" " x "
	Forrest x Woodworth
	" x Mitchell
	Dyer x Union
	" x Williams
	Mack x Cutler 71
	" x Union
	" x "
	Franklin x AP14-027-2
	Dyer x Wells
	Custer x Douglas
	LS77-13 x A75-302003
	Forrest x Crawford
	Franklin(L73-6536) x Pixie
	" " x Mitchell
	" x Williams
	Mack x Crawford
	Forrest x Ts76-989
	" x Union
	LS78-W245 x Fayette
	Pyramid x LS79-W220
	" x L77-994
	Green 759 x Franklin
	Crawford x Pyramid
	Union x LS78-W124-1
	Mack x Crawford
	" x "
	Pyramid x LS78-W124-1
	Essex x "
	Fayette x Pyramid
	" x "
	" x "
	" x "
	" x "
	" x "
	" x "
	" x "
	" x "

M: Minnesota A.E.S.

Serial Numbers:

M1	47 PI, 48-49 I	Lincoln(2) x Richland
M2	= Renville (1952)	" " x "
M3	47 PI	" " x "
M4	47 PI, 48 I	" " x "
M5	47 PI	" " x "
M6	48-49 PI	" " x "
M7	48 PI	Mandarin x "
M8	48 P0, 49-52 0, 63 I	Lincoln(2) x "
M9	48 P0, 49-52 0	" " x "
M10(M42-27)	48 PI, 49-51 I	" " x "
M11	48 P0, 49 PI	" " x "
M12	54 PI	Hawkeye x Flambeau
M13	54 PI	" x Ontario
M235	64 PI	Lincoln(2) x Richland
M304	58 I	Hawkeye x Flambeau
M305-2	47-48 P0	from variety "Moscow"
M315	57 PI	Hawkeye x Capital
M316	57 P0, 58-59 0	" x "
M316G	62 P0, 63 0	" x "
M317	57 P0	Adams x Capital
M318	57 PI	" x "
M319	57 PI, 58-61 I	Lincoln x Hawkeye
M320	57 P0	Hawkeye x Capital
M328	58-59 I	Lincoln x Hawkeye
M336	58 I	Blackhawk x (Lincoln(2) x Richland)
M350	59 P00, 60 00	PI 180.501 x PI 194.633
M351	59 P00, 60 00	" x "
M352	59 P00	" x "
M353	59 P00	Blackhawk x "
M354	59 P00, 60-61 00	" x "
M355	59 P00, 60 0	M10 x PI 194.633
M365	60 P0	" x PI 180.501
M366	60 P0	" x "
M367	60 P0	" x "
M368	60 P0	" x "
M369	60 P0	" x "
M370	60 P0, 61 0	" x "
M372(M53-117)	60 PI, 61 I	" x "
M373	60 PI	" x "
M375	60 PI	" x "
M376	60 PI	" x "
M379	60 PI, 61 I	" x "
M380	60 PI, 61-62 I	" x "
M384(M54-12)	62 P00, 63-66 00	Renville x Capital
M385	64 P00	* " x "
M386	64 P00	* " x "
M387	62 P00, 63 00, 64 0	" x "

M388	62 P00, 63-64 00	Renville x Capital
M389	62 P0, 63-64 0	* M10 <u>x</u> Capital
M391	62 P0, 63-65 0	* Renville <u>x</u> Capital
M391-1	65-66 0	* " <u>x</u> "
-4	67-68 0	* " <u>x</u> "
M393(M54-53)	= Clay (1968)	* " <u>x</u> "
M399	64 P00	Haro soy x Norchief
M401	64 PII, 65 I	Capital x M10
M402	62 PI, 63-64 II	Renville x Capital
M405	64 PII, 65 II	Grant x Haro soy
M406(M54-110)	63 P0, 63 PI, 64-65 0	Haro soy x Norchief
M412	63 P00, 64 00	= PI 132.207
M413	64 PI	Lincoln(2) x Richland
M414	64 PI	" x "
M417	= Traverse (1965)	Lincoln x Mandarin (Ottawa)
M421	64 P0	* Renville <u>x</u> Capital
M422	63 P00, 64-66 0	" x "
M423	64 P0	* M10 <u>x</u> Capital
M424	= Norman (1969)	Acme x Hardome
M425	64 P00, 65 00	" x Chippewa
M427	64 P0	Grant x Acme
M428	64 P0	Pagoda 25 x Chippewa
M431	64 P00, 65 00	Grant x Acme
M433	64 P00, 65 00	Acme x Chippewa
M443	64 P0	" x "

#### Year-Line Numbers:

M54-160	= Anoka (1970)	* Korean <u>x</u> M42-37
-167	65 PI, 66 I	Grant x Haro soy
-254	67 PI	" x " ?
M55-25	66 P00, 67 00	Acme x Chippewa
-30	65 P00, 66 00	" x "
-33	65 P00, 66 00	" x "
-47	67 P00	" x "
-48	66 P00, 67 00	" x "
-59	67 P00, 68 00	" x "
-67	66 P00, 67 0	Grant x Acme
-73	66 P00	" x "
-130	67 P0, 68 0	Acme x Chippewa
-134	65 P00, 67 00	Pagoda 25 x Chippewa
M57-69	67 PI, 68 I	5-1(M10 x PI 180.501) x M10
M58-12	66 PO	(M10 x PI 194.633) x Chippewa
-14	66 P0, 67-68 0	" " x "
-15	66 P0	" " x "
M59-85	67 PI	M54-139 x M54-232
-100	67 P00, 68 0	" x "
-109	67 P0, 68 0	" x "
-120	67 PI, 68-70 I	* M54-240 x M54-13 <u>2</u>
-121	= Swift (1972)	* " x " -
-211	67 P0	Lindarin x Haro soy

M59-213	= Steele (1972)	Blackhawk x Harosoy
-253	67 P0	Lindarin x "
M60-39	68 P0, 69 0	M42-4-6 x M44-46
-89	68 P0	Comet x M319
-90	68 PI	" x "
-92	68 P0, 69-70 0	" x "
-164	68 PI	M319 x Comet
-169	68 P0	" x "
-217	68 PI	M42-4-6 x M44-46
-219	68 PI	" x "
-221	68 PI	" x "
-222	68 PI, 69 I	" x "
-266	68 PI, 69 I	" x Pridesoy II
-313	68 PI	Wabash x Harosoy
-326	68 PI	" x "
-380	68 P0	Lindarin x "
-385	68 PI	Lindarin x Harosoy
-399	68 PI	Blackhawk x "
-400	68 P0, 69-70 0	" x "
-404	68 PI	" x "
-405	68 PI, 69 I	" x "
-406	68 PI, 69 I	" x "
-411	68 PI, 69 I	" x "
-424	68 PI	" x "
-425	68 P0, 69 0	" x "
M61-33	68 P0	Merit x Comet
-51	69 P0	" x M55-67
-52	= Wilkin (1972)	" x Harosoy
-60	= Ada (1972)	" x Norman
-65	69 P0	" x M55-19
-74	69 P0	" x M55-67
-96	= Evans (1974)	" x Harosoy
-99	69 P0	" x "
-105	69 P0	" x Norman
-153	69 PI	" x Harosoy
-189	69 PI	Harosoy x M319
-207	70 P0, 71-72 0	Merit x Norman
-216	70 P0, 71-72 0	" x Harosoy
-223	70 PI	" x "
-224	70 PI, 71-72 I	" x "
-229	71 PI	" x "
M62-19	69 PI, 70 I	M319 x M406
-21	69 PI	" x "
-56	69 PI, 70 I	Chippewa x M406
-93	69 P0, 70-71 I	Merit x "
-101	69 P0, 70 0	" x "
-103	69 P0	" x "
-130	69 P0	" x "
-151	69 PI	M319(2) x Comet
-155	69 PI	" x "

M62-162	69 PI	M319(2) x Comet
-173	70 P00, 71 0, 72-73 00	M387 x M406
-177	70 P0, 71-72 0	" x "
-220	70 P0	Merit x "
-253	70 PI	Norchief x M413
-263	70 PI, 71-72 I	Grant x M319W
-275	70 PI, 71 I	Norchief x Harosoy
-281	70 PI	Comet x M319(2)
-345	70 PI, 71 I	M319W x Harosoy
-374	70 P00	Traverse x Merit
M63-7	70 PI	M402 x M406
-9	70 P0	" x "
-11	70 P0, 71 0	" x "
-17	70 PI, 71 I	" x "
-36	70 PII	" x "
-38	70 P0, 71 0	" x "
-39	70 PI	" x "
-59	70 PI	Harosoy 63 x Hawkeye 63
-83	70 PI	Chippewa x PI 261.475, Shika No. 1
-87	70 P0, 71 0	" x "
-133	71 P00	M323 x M406
-147	71 PI	O57-2921 x M406
-172	71 P0, 72 0	M402 x "
-175	71 PI	Hawkeye 63 x Corsoy
-194	71 PI, 72 I, 73 II	Corsoy x PI 132.207
-211	71 PI	Harosoy 63 x Corsoy
-217	71 PI, 72 I	Corsoy x M372
-217Bf	= Hodgson (1974)	from M63-217
-229	71 PI	M402 x M406
M64-3	70 PI	Traverse x Tokachi Nagaha,PI 196.163
-64	71 P0	O57-2921 x Traverse
-96	72 P0	Merit x Portage
-101	72 00	" x M55-134
-105	72-74 00	Chippewa 64 x M433
-122	72 PI	A100 x O57-2921
-157	72 P0, 73-74 0	Merit x Amsoy
-165	72 PI, 73 I	M384 x L62-1932,Clark-e2
-175	73 PI	Chippewa 64 x Hark
M65-19	72 PII	Anoka x Prize
-69	72 PI, 73-74 I	M384 x Corsoy
-74	72 P0, 73 0	" x "
-85	72 P0	" x "
-94	72 P0, 73-75 0	" x "
-115	72 PI, 73-75 I	Anoka x Amsoy
-122	72 PI, 73-74 I	" x "
-207	73 P0, 74 0	Clay x Hark
-217	= McCall (1978)	M433 x "
-258	73 PI	Traverse x Corsoy
-270	73 P0, 74 0	Clay x Hark
-295	= Grande (1976)	Anoka x Magna

M65-442	73 PI, 74-75 I	Anoka x Amsoy
M66-18	74 P0, 75-76 0	Clay x Altona
-30	74 P0, 75-76 0	Magna x M61-20
M67-8	73 PI	Hark x Chippewa 64
-22	75 P0	Wayne x Clay
-31	75 P0	Clay x Provar
-37	75 P0	M402 x Chippewa 64
-42	76 PI	Corsoy x Provar
-44	76 PI	Wayne x Hark
-45	75 P0, 76 0	Merit x Rampage
-65	75 P0, 76-77 0	Clay x M406
-68	75 PI, 76 I	" x Provar
-144	75 PI	Amsoy x "
-148	75 PI	" x Wayne
M68-2	74 P0, 75 0	Wilkin x M59-120
-37	74 P0, 75 0	Evans x "
-38	75 P0	" x "
-48	74 PI, 75-76 I	" x "
-49	74 PI, 75-77 I	" x "
-94	74 PI, 75 I	M59-120 x Amsoy 71
-96	74 PII	" x " "
-99	74 PI	" x " "
-176	76-77 0	Merit x Beeson
-201	76-78 00	Evans x Steele
-202	76 00	" x "
-213	76 0, 77 00	M62-101 x Steele
-223	76 0	Steele x Amsoy 71
-254	76 PI	M61-65 x Steele
-275	76 PI	Evans x C1426
-284	76 PI	M62-101 x Amsoy 71
-333	77 PI, 78 II	M60-406 x Beeson
M69-14	76 00	Merit x Clay
-20	76 0	" x "
-36	76 PI, 77 I	" x Corsoy
-122	77 PI	(JA53-1 x Hark) x (M59-120 x C1477)
-124	77 0	M60-406 x M64-56
-128	77 PI	Steele(2) x C1477(Amsoy-Rps1)
-129	77 0	" " x "
-197	77 PI	Evans x Lee
-239	77 PI	M60-406(2) x C1477
-264	77 0	" " x SRF 300
-318	78 PI	JA53-1 x Hark
M70-9	77 PI	M64-3 x Amsoy 71
-74	78 0	Evans x PI 291.322
-77	78 0	JA53-7-6 x Hodgson
-121	78 PI	Evans x M63-217Y
-127	78 0	" x "
-128	78 PI, 79 I	" x "
-128E	= Dawson (1983)	" x "
-150	78 PI	Merit x M64-3

M70-153	= Simpson (1982)	
-179	78 PI	Steele x Hodgson
-187	81 PI, 82 I	Hill x Steele
-203	78 PII	Merit x SS65-5702
-242	78 PI	Evans x SS65-5701
-259	78 PI	" x M64-3
-260	78 PI, 79 I	M62-93 x M63-217Y
-330	78 0	" x "
-334	78-79 0	" x M64-3
-341	78 PII	" x "
-368	79 0	Steele x AP68-1016
-376	79 PI	M64-3 x M63-217Y
-388	79 PI	" x Clay
-390	79 PI	" x Corsoy
-411	79 00	" x "
-422	79 PI	" x M63-217Y
-571	79 PI	" x "
-597	79 PI	Evans x M64-3
-620	80 PI	Steele x AP68-1016
M71-17	79 00	Hill x Steele
-25	79 00, 80-81 0	Clay x Evans
-38	79 00, 80 0	" x "
-39	79 00, 80 0	Wilkin x M62-263
-43	= Ozzie (1983)	" x M62-275
-52	79-80 0	" x M63-217Y
-54	79 0	Evans x M62-345
-57	79 0	" x "
-65	79-80 0	" x M63-217Y
-80	79 PI, 80 I	Steele x M63-194
-99	79 0	Merit x M62-263
-100	79 PI	M61-224 x M63-217Y
-107	79 0	" x "
-148	80-81 00, 82 0	" x "
M72-3	79 0, 80 I	Clay x Evans
-24	80 0	Evans x Hodgson
-37	80 0	" x Wells
-38	80 PI	Wilkin x M65-115
-51	80 0	" x "
-52	80 0	Evans x M64-185
-79	80 PI, 81 I	" x M65-115
-95	80 PI	M62-263 x Wells
-107	80-81 0	Evans x Wells
-124	80 PI	Wilkin x M63-194
-127	81-83 0	ML7293-4(Merit x Lee) x Wells
-133	81 PI	Evans x unknown
-136	81 0	M63-194(2) x M61-224
M73-32	80 PI	" " x "
-37	80 0	Evans x XK505
-62	80-82 0	" x "
-71	81 0	M61-224 x Nagyszemu Feher
		Evans x M66-18

M73-80	80 PI, 81 I	M64-157 x M63-217Y
-92	80 PI	M65-69 x M66-18
-93	80 0	" x "
-130	81 PI	M68-49 x Hodgson
M74-12	= Glenwood (1987)	Evans x Peterson 85
-18	81 PI	M64-157 x "
-23	81-83 0	M68-2 x Hodgson
-38	81 PI	M68-49 x "
-42	81 PI	" x "
-55	81 PI, 82-83 I	M68-96 x "
-62	= Sibley (1986)	M68-256 x "
-68	81 PI	" x "
-69	81 PI	" x "
-155	81 0	Evans x M65-442
-167	82 0	Clay x Wells
-310	82 PI	Hodgson(2) x [M65-69 x (Chippewa x Higan)]
-312	82 PIIB	M68-48 x M64-3
-337	82 0	Evans x Pride B216
-349	82 0	M68-49 x M65-207
-355	= Chico (1983)	[Evans x (Merit x Lee)] x (M65-69 x M65-227)
-388	82 0	Evans x Agripro 1235
-403	82 PI	Hodgson x M67-45
-415	82 PIIB	Peterson P61-22 x (M)554-8
-416	82 PI	Agripro 1235 x "
-417	82 PI, 83 I	" " x "
-438	82 0	Evans x M68-303
-462	82 PI, 83 I	M65-94 x "
-463	82 0	M68-49 x M67-66
-498	83 PIIB, 84-85 I	Peterson PX20 x (M)554-10
M75-1	= Hodgson 78 (1978)	Hodgson(7) x Merit, <u>Rps1</u>
-2	79 PI, 80,84-85 I	Hodgson(4) x [M67-141 x (Chippewa x Higan, <u>Rps1-c</u> )]
-15	82 0	Peterson 85(2) x Evans
-25	= Dassel (1986)	Evans x M66-18
-205 *	82 PI	M64-157 x M65-115-1
-244	83 0	Evans x A73-19084
-275	83 PI	" x L70T-543
-300	83 PI	L70T-543 x (M)554-3
-305	should be M75-205	
-314	84 PI	M69-247 x KA 555
-323	84 PIIA	L70T-543 x (M)554-3
M76-33	83 PI	M64-157 x McCall
-49	83 0	M68-49-26 x "
-50	83-85 0	" x "
-55	83 PI, 84 I	M69-20 x McCall
-89	83 PIIB	M65-442 x (Hodgson(6) x Merit, <u>Rps1</u> )
-100	83 PI	" x " " " " "
-141	83 PIIB	M70-271 x Corsoy
-149	83-84 0	" x (Hodgson(6) x Merit, <u>Rps1</u> )
-151	83 PIIB	" x " " " " "

M76-160	83 PIIB	M70-330 x (Hodgson(6) x Merit, Rps 1)
-161	83 PIIB	" x " "
-167	83 PI	L71-2855 x " " " "
-281	83 PI, 84 I	M70-187 x " " " "
-313	84 PI	* Evans x M67-42
-314	84 0	" x M69-42
-322	84 PI	M68-49-26 x Hodgson 78
-353	84 0	" x FR51 IV
M77-2	84-85 0	* " x M68-176
-69	84 0	M70-135 x A74-102011
-137	84 PI, 85 I	M71-77 x Simpson
-156	84 0	M70-187 x Vickery
-191	84 PI	M68-49-26 x Simpson
-202	84 PIIA	* M71-135 x "
-218	84 0	* " x Asgrow A2440
-228	84 PI	M70-163 x M70-597
-251	= Proto (1989)	M70-504 x M69-42
-252	84-86 0	" x "
M81-7	85 0	Evans x M67-42
-8	85 0	Swift x Hodgson 78
-18	85-88 0	Evans x M65-442
-27	85-88 0	M68-49-26 x M70-294
-32	85 0	M69-264 x M69-305
-35	85 0	M70-70 x M66-30
-38	85 0	M70-74 x M70-184
-43	85 0	M70-417 x M69-122
-70	85-86 0	Evans x Maple Arrow
-76	85-86 0	M68-49-26 x M70-184
-77	85 PI, 86 I	" x "
-88	85 00	M68-333 x McCall
-98	85-86 0	M70-9 x M68-201
-99	85 0	" x "
-248	85 PI	M68-49-26 x Hardin
-296	85 0	" x Peterson 1677
-301	85 0	" x " "
-380	85 PI, 86 I	* M70-127 x Century
-381	85 PI, 86 II	" x "
-382	= Kato (1989)	" x "
-384	= Sturdy (1989)	" x "
-395	85 PI	Williams x Hodgson 78
-399	85 PI	Hodgson 78 x A75-305022
-411	85-86 00	* L75-0570 x McCall
-454	85 PI	" x Hodgson 78
-459	85 PI	" x " "
-497	85 0	M70-187 x M70-127
-564	85 PI, 86 I	M69-36 x Weber
-571	85-86 0	M70-484 x Dawson
-579	85 0	* " x "
-605	85 0	Dawson x M70-447
-621	84 PI, 85 I	seed from Double Embryo (unknown parentage)

M82-102	86 0	* M72-26 x Lakota
-106	= Kasota (1990)	M73-105 x Vickery
-118	86 PI, 87 I	M74-69 x Wells II
-262	86 00	Swift x M68-176
-303	86 00	M70-330 x "
-317	86-87 0	M71-38 x M68-213
-324	86 0	" x "
-387	86 0	Clay x Pride B216
-408	86 0	M71-25 x Hodgson 78
-418	86 00	" x M71-65
-434	86 00	" x M70-447
-545	86 0	M70-436 x Vickery
-559	86 PI, 87-89 I	Vickery x Century
-585	86 0	M70-330 x M68-176
-601	86-87 0	M70-484 x Vickery
-605	86 PIIA	" x Century
-660	86 PIIA	Wells x DeSoto
-772	86 PI	* M68- <u>256</u> x M70-597
-776	86 PI, 87 I	" x "
-791	86 0	" x L74-3897
-806	86 0	M71-52 x Wells II
-808	86 PI, 87 I	" x " "
-864	86 PIIA	M73-129 x L74-3897
-946	86 PI, 87 I	M74-69 x A77-112008
-951	86 PIIA	" x "
-996	86-87 0	M72-3 x Peterson 1677
-1004	86 0	" x " "
-1011	86-87 0	" x " "
-1027	86 0	* " x <u>NAPB HP20-20</u>
-1058	85 PIIA	Hardin x Gnome
-1065	85 PI	M75-2 x R79
-1068	85 0	Evans x "
-1079	87 PIIB	Hardin x Gnome
-1080	87 0	Evans x R79
M83-3	87 00	McCall x Maple Presto
-15	87 PIIB	A2 x Hodgson 78
-16	87 0	" x " "
-58	87 0	M74-227 x M75-131
-64	87 0	" x L78-189
-91	87 0	Weber x M75-2
-108	= Leslie (1991)	Hodgson 78 x Pella
-136	87 PI	Weber x M71-39
-216	87 0	M71-25 x M71-65
-223	87 0	" x "
-329	87 PI	M73-62 x Vickery
-357	87 PI, 88 I	M71-52 x Asgrow A2656
-377	87 PI	M72-127 x M74-359
-413	87 0	Evans x Simpson
-442	87 0	M71-148 x Pioneer 0877
-449	87 0	M74-38 x M74-160

M83-459	87 0	M74-69 x M75-48
-504	87 PI, 88 I	M71-52 x M74-23
-630	87 PI	M72-24 x A78-123018
-715	87-88 0	M73-62 x Simpson
-727	87-88 0	" x "
-734	87 0	" x "
-744	87-89 0	M73-129 x M73-37
-747	87 0	" x "
-750	87 0	" x "
-766	87-89 0	Evans x M74-394
-767	87 PI, 88 I	M70-260 x Asgrow A1564
-770	87-88 0	" x " "
-779	87 PI	" x " "
-785	87 PI	M71-38 x M74-417
-791	87 PI	" x "
-792	87 PI, 88 I	" x "
-796	87 0	" x "
-819	87 PI, 88 I	Evans x Century
-823	87 PI	" x "
-830	87 PI, 88-89 I	" x "
-861	87 PI	M71-80 x Glenwood
-895	87 PIIB	M74-155 x M72-124
-899	= Bert (1991)	M74-270 x A78-123018
-904	87 PI	" x "
M84-74	88 0	M71-148 x Ozzie
-93	88-89 00	" x "
-140	88 0	M73-62 x M76-260
-293	88-89 0	M71-148 x M75-2
-302	88 0	M73-62 x Dawson
-341	88 PI	M74-155 x M74-403
-345	88 PI	" x "
-384	88 PI	" x M76-100
-389	88 0	M75-243 x Dawson
-390	88 0	" x "
-395	88-89 0	" x "
-414	88-89 0	" x M76-260
-449	88-89 0	Simpson x M71-148
-456	88-90 00	" x "
-557	88 PI	Hardin x PI 297.503
-568	88 0	Glenwood x M74-55 (P)
-574	88-89 0	Weber x M75-299
-747	88 PI	M75-274 x M76-151
-748	88-90 0	" x "
-756	88 0	M75-275 x Jacques 88
-833	88-90 0	M76-142 x Weber
-850	88 0	M76-148 x Glenwood
-855	88 PI	" x "
-916	88 PI, 89-90 I	A79-136012 x Dawson
-949	88 PI	M72-3 x M75-15
-1005	88 PIIB	Hardin x Glenwood

M84-1023	88 PI	M71-148 x M76-151
-1034	88 PI, 89-90 I	M75-2 x K1062
M85-23	89 0, 90 00	M71-148 x Simpson
-49	89 0	M73-62 x "
-52	89-90 0	" x "
-81	89 0	" x "
-85	89-90 0	" x "
-109	89 PI	M74-179 x M77-75
-122	89 PI, 90 I	" x "
-148	89 PI	M74-388 x M74-167
-173	89 0	M77-120 x Simpson
-201	89 0	A79-134008 x Ozzie
-202	89 0	" x "
-260	89 0	Evans x M74-498
-314	89 0	" x M76-402
-339	89 0	M71-148 x M76-402
-396	89-90 0	M73-62 x M74-399
-564	89 0	M74-337 x M74-23
-582	89 00	McCall x Corsoy 79
-610	89-90 I	Fayette x McCall
-647	89 PIIA, 90 II	Ozzie x Fayette
-736	89 PI	M76-160 x Dassel
-815	89 PI	M74-55 x M77-55
-824	89 PI	" x M77-164
-826	89 PI	" x "
-907	89 PI, 90 I	Simpson x A80-147003
-1004	89 PI	M73-62 x Pella
-1112	89-90 0	M74-349 x M77-210
-1122	89 PI	" x "
-1222	89 PI	M76-160 x Dassel
-1292	89 PIIA	BSR 201 x Dawson
-1310	89 PI	A79-134008 x M76-55
M86-122	90 0	M72-127(E) x M81-610
-130	90 0	" x "
-138	90 0	" x PI 438.454
-162	90 0	M73-62 x Corsoy 79
-169	90 0	" x " "
-245	90 0	M75-244 x M75-322
-299	90 0	M76-33(w) x M74-498
-356	90 0	M81-610 x M76-349
-479	90 0	Evans x Hardin
-571	90 0	Ozzie x A80-244003
-575	90 PI	" x "
-584	90 PI	" x "
-587	90 PI	" x "
-626	90 0	Weber 84 x Dassel
-750	90 0	M76-160 x Hardin
-752	90 PIIB	" x "
-892	90 PI	Hack x Hodgson 78
-912	90 PIIB	" x M81-79(p)

M86-918	90 0	Jacques J103 x Ozzie
-956	90 PI	Jacques J102A x Dassel
-1008	90 PI	L81-4583 x Hodgson 78
-1009	90 PI	" x " "
-1015	90 PI	" x " "
-1322	90 I	M75-2 x L77-906
-1410	90 I	M72-3 x L77-756
-1800	90 II	M70-187 x L77-906
-1973	90 II	L77-906 x M75-89
-2197	90 0	M72-127(E) x M81-610
-2237	90 0	M73-62 x Corsoy 79
-2301	90 00	M76-55 x M74-23(P)
-2334	90 0	Evans x Asgrow A1937
-2337	90 0	" x " "
-2372	= Minnatto (1989)	" x PI 437.267(Dobruzanca I)

Md: Maryland A.E.S.

Md58-252	60 PIV	Perry x Wabash
Md59-150	61 PIV	L46-1503 x C985
-174	61 PIV	C985 x C799
-245	61 PIV	" x Perry
-281	61 PIV	Wabash x "
-285	61 PIV, 62-63 IV	Lincoln x C985
-1552	61-62 PIV	Adams x "
-1555	61 PIV	" x "
-2901	61 PIV	C799 x Perry
-2907	61 PIV	" x "
-3449	61 PIV	Lincoln x C985
Md62-3103	67 PIV	2nd cycle of 20-line intermating
-3223	69 PIV, 70 IV	from bulk population
-3303	70 PIV	2nd cycle of 8-line intermating
		(Adams, Lincoln, Perry, Wabash, C799, C985, L46-1503, FC 33.243)
-3303-3 *	= Wye (1971)	from Md62-3303
-3605	69 PIV	from bulk population
Md63-148-3	69 PIV	(9 protein sources x Dunfield) x Clark
-949-4	69 PIV	" " " x " x "
Md64-3953	69 PIV	(Dunfield x PI 101.404B) x Clark(2)
-4050	69 PIV	" x " x " "
-4552	69 PIV	" x " x " "
-4749	67 PIV	Clark(2) x (Dunfield x PI 101.404B)
-4978	67 PIV	" " x " x "
Md66-1024	71 PIV, 72 IV	2nd cycle of intermating
-1041	70 PIV	1st " " "
-1258	70 PIV, 71-72 IV	2nd cycle of 8-line intermating
-1337	70 PIV	" " " intermating
Md67-4550-3	74 PIV	8-line intermating
Md68-1766-2	74 PIV	" "

Md70-1212	74 PIV	3rd cycle of 8-line intermating
-1428	74 PIV	" " " "
-1626-67	78 PIV	" " " "
-2221	75 PIV, 76 IV	" " " "
-2221-71	78 PIV	" " " "
Md71-407	= Miles (1978)	Clark x D64-4731
Md79-5043	= Morgan (1986)	Union x Miles
-5144	82 PIV, 83 IV	L70D6-16 x Miles
Md80-IL2-I*	83 PIV, 84-86 IV	Forrest x (Bonus x Cutler)
-6007	83 PIV	Md71-1643-82 x DeSoto
Md81-5123	84 PIVA	DeSoto x A75-302003
-5129	84 PIVA	" x "
-0838	85 PIVA	PI 88.302-1 x A75-305022
-0942	85 PIIIB	A75-305022 x Elf
-0953	85 PIVA, 86-88 IV	" x "
-AIC2-48	84 PIVA	BSR 301 x Essex
Md82-5230	85 PIVA	A75-305010 x Miles
-5770	85 PIVA	Md70-2221-71 x "
Md83-48	89 PIVA	L76-0022 x HW74-3366
-1210	86 PIVB	A75-305022 x Elf
-2048	= Bass (1989)	BSR 301 x Essex
Md84-0502	87 PIV	" " x "
Md85-5376	88 PIVB, 89 IV	Douglas x N77-179
-5443	= Corsica (1991)	Essex x Harper
Md86-5324	89 PIVA, 90 IV	Douglas x Md77-5675
Md87-I12D	89 PIIIB	Forrest x K1007

Me: Maine A.E.S.

Me13	60 P00	PI 194.628 from Sweden in 1951
Me27A	60 P00	PI 194.633 " " " "
Me57B	60 P00, 61 00	PI 194.644 " " " "
Me60C	60 P00, 61 00	PI 194.645 " " " "

Note: For MM lines from Purdue A.E.S. see page 39.

ND(F): North Dakota A.E.S. (Original F prefix was changed to ND in 1955 and F assigned to Florida).

ND8 (F)	72 P0	Grant x Harosoy
ND357-5 (F)	47 P0	Mandell x Mandarin
ND372-8 (F)	46-47 0	Illini x "
-9 (F)	47 P0	" x "
ND427-14 (F)	47 P0	Cayuga x "
ND457-18 (F)	46-47 0	" x Hudson Manchu
-28 (F)	46-47 0	" x " "
ND801	81 0	Merit x L62-973
ND803	81 0	Wilkin x L62-361ND851 85-86 00
ND851	85-86 00	(BD21115 x SRF150) x (Merit x Anoka)
ND852	85 0	Wilkin x L62-361

ND853	85 0	Wilkin x L62-361
ND854	85 0	(BD21115 x SRF150) x (Merit x Anoka)
ND855	85 0	Wilkin x L62-361
ND861	86-87 00	" x "
ND862	86 00	" x "
ND863	86-87 00	" x "
ND864	86-87 00	" x "
ND865	86-87 00	" x "
ND866	86-87 00	" x "
ND867	86-89 00	" x "
ND868	86-89 00	" x "
ND941	88 00	from Wilkin
ND1019	88 0	Merit x SRF 100
ND2328	88 0	Wilkin x L62-973
ND2329	88 0	" x L62-361
ND2330	88 0	" x L62-973
ND2337	88,90 00	" x L62-361
ND2338	88-90 00	" x "
ND2353	88 00	" x "
ND2361	88 0	* (BD21115 x SRF 150) x (Merit x Anoka)
ND2373	88 0	Wilkin x L62-973

O, OT, (BC, BD) Agriculture Canada, Ottawa, Ontario

O-10	47-49 P0	a natural cross in Manchu
-17	= Acme (1953)	from Pagoda
-200	49 P0, 50-51 0	from Manchu
-255	47 P0, 48-50 0	Strain 171 x A.K. (Harrow)
O48-36	= Comet (1953)	Pagoda x Mandarin (Ottawa)
O50-11	51 0	A.K. x Pagoda
O52-710	55-56 0, 57 I	Blackhawk x Mandarin (Ottawa)
-793	55-56 0, 57 I	A45-251 x Flambeau
-903	59 P00, 60-61 00	sel. 753-1 by Sven A. Holmberg, Norrkoping, Sweden; same as PI 194.654
O55-2065	= Merit (1959)	Blackhawk x Capital
O56-2678	61 P0, 62-64 0	" x "
O57-2824	62 P0	Adams x A43K-884
-2826	61 P0, 62-64 0	" x "
-2905	61 P0, 62-63 0	Blackhawk x Capital
-2909	61 P0, 62 0	" x "
-2921	59 P00, 60-61 0, 62-65 00	" x "
-2921-M	65 00	Minnesota breeder seed of O57-2921
-O	65 00	Ontario breeder seed of O57-2921
O60-3396	64 P00, 65 00	from PI 180.501 from Germany in 1949
O73-5	76 00	Mandarin (Ottawa) x Holmberg 827-4
-15	= Maple Arrow (1976)*	Harosoy 63 x Holmberg 840-7-3
OT80-1	= Maple Amber (1981)	Holmberg 840-7-3 x (Harosoy 63 x Altona)
-2	80-81 00	Maple Presto x Evans
-3	80 00	(Amsoy x Portage) x Holmberg 840-7-3
-12Y	= Maple Ridge (1984)	Fiskeby III x Evans

OT80-16	81 00	Holmberg 744-2(PI 194.641) x L62-667(2)
-18	81-82 00	(M62-173 x Holmberg 827-4) x (Evans x CM145)
OT81-5	= Maple Isle (1984)	Holmberg 744-2(PI 194.641) x L62-667(2)
-6	82 00	Maple Presto x Evans
OT83-4	= Maple Donovan (1986)	Maple Arrow x Harcor
OT84-4	85-86 00	Evans(3) x Holmberg 840-7-3, <u>e3</u>
-7	85 00	231-4-5-1 x McCall
-12	= Maple Glen (1987)	* BD22115-13 x Premier
-14	85-86 0	Maple Arrow x Wayne
-14BR	87 0	" " x "
OT85-5	87-88 00	Evans(4) x Holmberg 840-7-3, <u>e3</u>
OT86-1	87 00	Coles x DO-9-2-1-2
-5	87-88 0	(Maple Presto x Williams) x Weber
-6	87 0	" " " x "
-9	87 00	(Evans(2) x Holmberg 840-7-3) x L62-667
OT87-4	89-90 00	(Thompson T7803 x BK-17-1-4) x McCall
-7	88-90 00	(Maple Presto x Williams) x Weber
-8	88-89 00	" " " x "
-12	88 00	McCall x Maple Amber(2)
OT88-1	89 0	BD22115-13 x Weber
-2	89 0, 90 00	[(Holmberg 840-7-3 x Evans(2)) x
		Maple Arrow] x Weber
-8	89 00	McCall x Maple Amber(2)
-11	89-90 00	Maple Ridge x Lakota
OT89-24	90 00	OX611 x Maple Presto
BC 1413	78-79 00	* (Amsoy x Portage) x Holmberg 827-4
BD 21117*	= Maple Presto (1979)	* " " x Holmberg 840-7-3

O, OX: Agriculture Canada, Harrow, Ontario

O3-33	= Hardome (1953)	Mandarin (Ottawa)(2) x A.K. (Harrow)
O-378-28	= Harwood (1970)	Harosoy 63(L59-738) x C1270
O-671	61 PII, 62 II	Mandarin (Ottawa) x [A.K. (Harrow) x Korean]
O-1259	65 PII	3-7/50[Harman x 9/42(Mandarin (Ottawa) x
		A.K. (Harrow))] x Chippewa
O-4323	60 P0, 61-65 0	Capital x Hardome
O-4456	64 P0	Hardome x Adams
O-31253	63 PI	Lincoln x [Mandarin (Ottawa) x A.K. (Harrow)]
O-201855	64 PI	Hardome x Monroe
OX1-310	68 PI	3-11-50[Harman x (Mandarin (Ottawa) x A.K.
		(Harrow))] x Blackhawk
OX271	= Harcor (1975)	Corsoy x OX383
OX350	71 PI	Harosoy 63 x Harman
OX383	70 PII	Corsoy x Harosoy 63
OX643	= Harlon (1974)	Blackhawk x Harosoy 63
OXHodgson lc Hm	= Haroson (1987)	Hodgson(3) x M75-2(Hodgson(4) x [M67-141 x
		(Chippewa x Higan, <u>Rpsl-c</u> )]

OAC: University of Guelph, Guelph, Ontario

OAC 44	61 PI	Flambeau x Hawkeye
85	= Vansoy (1970)	(sel. Lincoln x Flambeau) x Goldsoy
87	65 PI	Blackhawk x Mandarin (Ottawa)(2)
88	65 PI	" x " "
89-5	72 P0	UM-S58-544 x Merit
OAC-22-815	79 00	* Fiskeby V <u>x</u> Harosoy 63
OAC81-2	= Bicentennial(1983) *	" <u>x</u> "
OAC82-07	= OAC Libra (1985) *	<u>FH 31-3</u> x <u>Evans</u>

ORC: Ridgetown College, Ridgetown, Ontario

ORC8502	=RCAT Alliance (1990)	Wells II x Williams
8601	=RCAT Persian (1990)	M73-62 x FH31-3
8605	88 PIIIB	HC77-878 x A79-138024
8701	88 PIIIB	Corsoy 79 x Pioneer 1981
8703	89 PI	Hodgson x FH22-815
8706	88 PIIB	HC77-878 x A79-138024
8707	89 PI	Pioneer 1981 x A78-123018
8801	= RCAT Angora (1991)	Pride B152 x Thompson T8112
8802	89 PI	Hack x Asgrow A1895
8803	= Brock (1991)	Pride B152 x HW8039
8805	89 PIIA, 90 II	A80-147002 x Pride B152
8902	90 PIIB	Hack x Jewel
8905	90 PIIB	Pride B152 x "
9001	90 0	* " " <u>x</u> "
9003	90 PI	" " x Thompson T8112

PI: Plant Introduction Office, USDA

PI 54.563-3	= Boone (1935)	Harbin, Heilongjiang, China, 1921, selected at Missouri A.E.S.
PI 65.344	= Ontario (1941)	Harbin, Heilongjiang, China, 1925
PI 68.474	40-42 II	Shuangcheng, Heilongjiang, China, 1926
PI 68.577-3	40 II	Mangou, Northeast China, 1926
PI 68.623-1	39-40 II	" " " "
PI 68.644-2	40 II	" " " "
PI 68.666	42-44 I	Shuangcheng, Heilongjiang, China, 1926
PI 70.218-2	39 IV	Wujiazi, Heilongjiang, China, 1926, selected at Indiana AES
-2-6-11	39 IV	
-2-6-13	39 IV	
-2-6-15	39-40 IV	
-2-6-20	39 IV	
-2-6-21	39 IV	
-2-6-23	39 IV	
-2-19-3	= Patoka (1940)	

PI 70.459	39 II	Lalincheng, Jilin, China, 1926
PI 70.478	39-42 II	Mishatzu, " " "
PI 71.506	61 PIV	Nanjiang, China, 1927
PI 79.610	42 I	Anda, Heilongjiang, China, 1929
PI 79.885	39-40 II	Uchi Miche, Northeast China, 1929
PI 88.447-2	41 II	Yingkon, Northeast China, 1930
PI 89.152	55 PIII	'Hakuchuta' from North Korea, 1930
PI 91.109	42-43 II	Northeast China, 1931
PI 91.161	39-42 II	Kaiyuan, Liaoning, China, 1931
PI 92.470	43 I	Soviet Union, 1931
PI 92.592	42-43 II	Gongzhuling, Jilin, China, 1931
PI 92.717	40-43 II	" " " " "

S, SS: Missouri A.E.S.

S-100	= S-100	rogue in Illini
S3	63 PIV, 64 IV	(Clark 63 x L46-2132-A14(2)) x (L49-4091, <u>rxp</u> x Clark(7))
S4	64 PIV	S3 x [S62-4064 x (Clark(3) x Kanrich)]
S5	= Custer (1967)	* {[ (Scott(4) <u>x</u> Peking)(3) x (i-i <u>Rhg4</u> from Scott(2) <u>x</u> Peking) ] x (Scott(9) x Blackhawk, <u>Rps1</u> ) } x (Scott(5) <u>x</u> Peking)
S6	73 PIV	L61-1112 x [Wayne(4) x (Clark(3) x Kanrich, <u>Rpm1</u> )]
S7	73 PIV, 74 IV	L61-1112 x [Wayne(4) x (Clark(3) x Kanrich, <u>Rpm1</u> )]

#### Cross-Line Numbers:

S32-3	42-43 III	PI 37.062 x Illini
-8	42-43 III	" x "
-11	42-43 IV	" x "
S49-5	42 IV	Virginia x PI 54.610-3
-12	42 IV	" x "
-18	42-43 IV	" x "
S55-10	44-45 IV	" x PI 37.062
-19	45-46 IV	" x "
-35	44 IV	" x "
S66-13	39 IV (not in report)	Illini x Virginia
-21	39 IV " " "	" x "
-27	39 IV " " "	" x "
-43	39 IV	" x "
-57	39 IV	" x "

Year-Line Numbers:

S43-1166	47 IV	L37-1355 x Scioto
S44-241	48 PIV	Chief(2) x Macoupin
-307	48 PIV	" " x "
-374	48 PIV	" " x Boone
S45-41	48 PIV	Lincoln x Patoka
-234	48 PIV	C149 x L37-1355
S47-63	49 PIV	Lincoln x Patoka
-86	49 PIV	" x L37-1355
-270	49 PIV, 50 IV	Chief(2) x Macoupin
-353	49 PIV	Lincoln x S-100
-369	49 PIV	" x "
-412	49 PIV	" x "
-434	49 PIV	" x "
-5236	49 PIV	" x "
S48-96	50 PIV	Lincoln(2) x C171
-101	50 PIV	" " x "
-139	50 PIV	" " x "
-160	50 PIV	" " x Chief
S49-966	52-53 IV	" " x Ogden
S51-441	52-53 IV	" " x "
S52-5152	55 PIII, 56 PIV	" " x Richland
-5164	55 PIII, 56 PIV, 57 IV	" " x " ; from L44-1458
-5174	55 PIII	" " x " ; " "
-5179	57 PIII, 58-60 III	" " x " ; " "
-5437	55-56 PII	Lincoln x A43-108
-5486	55 PIII	" x "
-5551	55 PIII	L44-1219 x Hawkeye
-5558	55 PIII	" x "
-7158	= Scott (1959)	D49-2525 x L46-5679
-7158-61	62 PIV	" x " ; = Scott subline
-7160	56 IV	" x "
-7613	56 PIV	from C985
S53-5180	56 PIV	Lincoln x Hawkeye
-5191	56 PIV	" x "
S54-1046	57 PIV	Hawkeye x (L49-4091 x L46-2132-1)
-1207	57 III	" x " " ; see S56-1018
-1207(Dull)	58 PIII	" x " "
-1207(Shiny)	58 PIII	" x " "
-1714	56 PIV, 57 IV	L49-4091 x Clark
-1771	57 PIV	" x L46-2132
-2088	57 PIV	" x "
-2089	57 PIV	" x "
-2090	57 PIV, 58 IV	" x "
-6135	57 PIII	Hawkeye x Bavender Special
-6154	57 PIII	Adams x Clark
-6160	57 PIII	" x "
-6247	57 PIII	" x "
-6267	57 PIII	" x "
-6292	57 PIII	" x "

S55-7047	58 PIV	N48-1248 x Adams
-7116	58 PIV	D49-2525 x L46-5679
-7144	58 PIV	" x "
S56-1018	58-59 III	from S54-1207
-5004	58 PII, 59-60 II	Lincoln(2) x Richland
-5092	58 PIV	" " x "
-5162	58 PIV, 59-60 IV	" " x "
S57-3575	59 III	from radiated Clark
-4196	59 PIV	S54-1714 x Clark
-4241	59 PIV	" x "
-4260	59 PIV	" x "
-4264	59 PIV, 60-61 IV	" x "
-4270	59 PIV	" x "
-4302	59 PIV	" x "
-4319	59 PIV, 60 IV	" x "
-4362	59 PIV	" x "
-5343	59-60 IV	Clark(3) x S54-1714
S59-632	62 PIV	PI 86.145 x Clark (3)
-1550-1	62 PIV	L49-4091, <u>x</u> p x Clark(4)
-2501	62 III	from radiated Clark
-2504	62 III, 63-64 III	" "
-2506	62 PIV	" "
-2521	62 PIV	" "
S61-386	63 PIV	Clark 63 x L46-2132-A14(2)
S62-4064	63 PIV, 64 IV	Clark(3) x L46-1503
-4067	64 PIV	(Clark 63 x L46-2132-A14(2)) x (L49-4091, <u>x</u> p x Clark(7))
-4068	64 PIV	same as above
-4076	64 PIV	" " "
-4087	64 PIV	" " "
-4098	64 PIV	" " "
-4100	64 PIV	" " "
-4104	64 PIV	" " "
S63-3607	64 PIV	S62-4064 x (Clark(3) x Kanrich, <u>Rpm</u> )
S76-2052	78 PIV	D67-3297 x L73-827
-2102	78 PIV	" x Essex
-2109	= Pershing (1984)	" x "
-2145	78 PIV	" x "
-2169	78 PIV	" x "
S78-57	83 PIV	V71-807 x Franklin
S79-4296	83 PIV	Bedford x Crawford
S80-257	83 PIV	Williams(2) x (Clark(6) x T204)
-265	83 IIIA	" " x " " "
-285	83 IIIA	" " x " " "
S81-2203	85 PIVA	* <u>S75-212</u> x (Crawford x J74-67-7)
S82-1034	85 PIVA	Bedford x S78-5078
-1044	85 PIVA	Cumberland x Forrest
-1104	84 PIVA	* L75-8064 x _____
-1111	86 PIVA	" x "
-1174	84 PIVA	* " x _____

S83-1004	= Delsoy 4500 (1989)	Cumberland x Forrest
S84-1684	88 PIIIB	Will x Fayette
-6095	87 PIV	Douglas x PI 88.788
-6484	86 PIVA, 87 IV	" x Peking
S85-1054	88 PIIIB	L77-443 x Douglas
-1084	= Delsoy 4210 (1991) *	<u>L77-1233</u> x "
-1101	88 PIVB, 89 IV	Fayette x "
-1104	88 PIVB	" x "
-1345	87 PIV	Douglas(2) x Fayette
-1554	90 IV	Douglas x Peking
-10971	89 PIVA	Fayette x Douglas
-10973	89 PIVA	" x "
-11561	87 PIV	* L77-443 x <u>L77-906</u>
-11562	89 PIVA	" x "
S86-2187	89 PIVA	Douglas x Peking
-2209	90 IV	Peking x Elf
-2212	89 PIVA, 90 IV	Peking x Elf
S88-1458	90 PIVA	S82-1044 x S79-4296
SS64-2122	69 PIV	Scott(3) x FC 33.243
-2124	69 PIV	" " x "
SS65-5704	71 PIV	Clark x (Scott(2) x Peking)

SD: South Dakota A.E.S.(SD641 to SD6411 were colchicine treated in the F1)

SD641	66 P0	Blackhawk x Clark
SD642	66 P0	(Hawkeye x Capital) x (Blackhawk x Adams)
SD643	66 P0, 67 0	colchicine-treated Chippewa
SD644	66 PI	Blackhawk x Capital
SD645	66 PI, 67 P0	(Blackhawk x Clark) x (Adams x Clark)
SD646	66 PI, 67 P0	(Adams x Clark) x Mandarin (Ottawa)
SD647	66 PII	Blackhawk x Capital
SD649	66 PII	(Grant x Adams) x (Capital x Grant)
SD6410	66 P0	Blackhawk x Adams
SD6411	66 P0	Harly x Clark
SD6412	68 PI	Blackhawk x Capital
SD73-1	74 PII	Hawkeye x Capital
-2	74 PI	Harosoy x Grant
-5	74 PI	Blackhawk x Capital
-9	74 PII	(Adams x Clark) x Blackhawk
-10	74 P0	(Adams x Capital) x Grant
-11	74 P0	colchicine-treated Renville
-13	74 P0	(Adams x Capital) x Blackhawk
-14	74 PI	Blackhawk x Capital
-16	74 PI	" x "
SD87005	89 PIIA	* Amsoy x HC78-245
SD87031	89 PI	Ix93-100 x Amsoy

SL, (AHW): 2 or more states cooperatively

SL1-H	61-62 IV	(Clark(5) x L49-4091, <u>rxp</u> ) x (Clark(6) x Blackhawk, <u>Rps1</u> );
SL1	= Clark 63	composite of resistant lines from SL1-H
SL1-1	64 PIV	from SL1; lines selected for yield
SL2	62-63 III	L5 x (Shelby(5) x Mukden, <u>Rps1</u> );
SL4	65 III	Shelby- <u>Rps1 rxp</u>
SL5	65 IV	L5 x (Shelby(8) x Mukden, <u>Rps1</u> );
SL6	65-66 II	Shelby- <u>Rps1 rxp</u>
SL7	70 I	(Kent(7) x L49-4196, <u>rxp</u> ) x (Kent(8) x Mukden, <u>Rps1</u> )
SL8	70-71 I	(Lindarin(8) x Mukden, <u>Rps1</u> ) x (Lindarin(6) x L58-2080, <u>rxp</u> )
SL9	70 III	L10(8) x Kanrich, <u>Rpm</u> ; Chippewa- <u>Rpm Rps1 rxp</u>
SL10	71 PIII	L16 x SL7; Chippewa-I <u>r Rpm Rps1 rxp</u>
SL11	71 PIII, 72-74 III	Wayne(10) x Kanrich, <u>Rpm</u>
SL12	71 III	L15 x (Wayne(10) x Kanrich); Wayne- <u>Rpm Rps1</u>
SL13	72 PIV	[L15 x (Wayne(4) x L11)] x SL9;
SL14	72 PIV	Wayne- <u>r Rpm Rps1</u>
AHW Pella BC	= Pella 86 (1986.)	[L15 x (Wayne(4) x L11)] x SL9;
		Wayne-I <u>r Rpm Rps1</u>
		L12 x (Clark 63(7) x Kanrich, <u>Rpm</u> );
		Clark-I <u>r Rpm Rps1 rxp</u>
		same as above
		Pella(5) x Williams 82, <u>Rps1-k</u> .

U: Nebraska A.E.S.

U10112	74 PII	C1432 x C1430
U10113	74 PIII	" x "
U10124	75 PII	" x "
U10132	74 PIII	Amsoy x Wayne
U10148	74 PII	Calland x C1436
U10150	75 PII	C1430 x "
U10339	74 PIII	" x "
U10426	77 PII	C1432 x C1430
U10727	77 PIII, 78-79 III	Wayne x C1317-71
U10816	75 PII	C1253 x Wayne
U10840	74 PII	" x "
U10913	75 PII	" x "
U10917	75 PIII, 76 PII, 77 II	" x "
U11239	78 PII, 79 II	Amsoy x Wayne
U11406	= Nebsoy (1979)	C1432 x C1430
U11532	77 PII, 78 II	Wayne x C1317-71
U11632	78 PII	C1432 x C1430
U20109	79 PIII	Amsoy x Wayne
U20249	77 PIII	C1317-71 x Amsoy
U20325	78 PII, 79-80 II	" x C1253

U20439	78 PII	C1317-71 x C1253
U21408	78 III	" x Amsoy
U36276	= Mead (1981)	Bonus x Wayne
U36344	78 PII	C1266 x C1264
U37219	78 IIII, 79 III	C1430 x Calland
U37710	78 IIII	L15 x C1517
U37729	78 IIII	" x "
U46192	79 IIII	Amsoy x Cutler
U46484	78 IIII	Merit x Bonus
U46682	79 IIII	L65-4050 x Adelphia
U46734	78 PII	Merit x Bonus
U46762	79 PII	" x Cutler 71
U56355	= Platte (1982)	C1477(Amsoy 71) x C1421
U56491	79 PII	Adelphia x Clark 63
U57073	79 IIII, 80 III	Wayne x Cutler
U57139	79 IIII, 81 III	Beeson x Clark 63
U57141	79 PII	Calland x Cutler
U57162	79 IIII	Wayne x Calland
U57250	79 IIII	Adelphia x Amsoy
U59207	79 PII	Williams x Amsoy 71
U59218	80 PII, 81 II	" x " "
U59236	79 PII	" x " "
U59245	79 IIII	" x " "
U66750	81 PIIB	" x (L65-4050 x L62-1547)
U75616	81 PIIB	* (Beeson x L15) x <u>Amsoy</u>
U75633	= Logan (1985)	* " " x _____
U75680	81 PIIB	* " " x _____
U75681	81 PIIB	* " " x _____
U76168	82 PIIB	Williams x PI 89.075
U76302	82 PIIB	" x Amsoy 71
U76323	82 PIIB	" x " "
U76351	82 PIIB	" x " "
U76360	= Fremont (1985)	" x " "
U76361	82 PIIB	" x " "
U76467	82 PIIB	" x " "
U86120	83 IIIIA	T260(N69-2774) <u>ms1</u> x Williams

Year-Line Numbers:

U49-2	53-56 III	from mixed seed
U50-41	54-56 III	from U49-2
U51-5	56 IIII, 57 III	" "
U52-28	58 PII	Lincoln x Richland
-38	59 IIII	Hawkeye x H6150
-42	58 IIII	" x "
U54-75	59 PII, 60 II	Lincoln x Blackhawk
U56-N171	62 PII	from radiated Hawkeye
U57-6804	62 PII, 63 II	Hawkeye x H6150
U78-83038	84 IIIIA	(Hark x Wayne) x [(Blackhawk x Harosoy) x Kent]

U78-83051	84 PIIIA	(Hark x Wayne) x [(Blackhawk x Harosoy) x Kent]
U80-64032	84 PIIIB, 85-87 III	* <u>L69U-37-17-5</u> x Nebsoy
-65127	84 PIIIB, 85 III	* <u>L70T-543G</u> x <u>Amsoy 71</u>
-68004	85 PIIIA	Williams x Hodgson
-68130	85 PIIIA, 86-87 III	" x L69U40-19-1
-70070	84 PIIIB, 85 III	Bonus x [Wayne x (Clark x Adams)]
U81-63087	85 PIIA	U10917 x Elf
-64002	85 PIIA	Hodgson x L70T-543G
-65007	85 PIIIA	Nebsoy x "
-65008	85 PIIA	" x "
-65009	85 PIIA	" x "
-65026	85 PIIA	" x "
U82-63017	85 PIIA	Calland x Bonus
-65123	85 PIIIA	L71-2855 x Nebsoy
-65126	85 PIIA	" x "
-65142	85 PIIA	" x "
-67005	85 PIIIA	L66-1359 x Chippewa 64
-67014	85 PIIIA	Nebsoy x A74-203002
-69128	85 PIIIA	A74-304009 x C1529
-70024	85 PIIIA	Nebsoy x Elf
-70033	85 PIIIA	" x "
-72035	85 PIIA	L71-2855 x Nebsoy
U83-61051	86 PIIA	Nebsoy x Elf
-63035	86 PIIA	" x Beeson
-64005	86 PIIA	U10816 x Elf
-64008	86 PIIA	" x "
-64012	86 PIIA	" x "
-64015	86 PIIA	" x "
-64062	86 PIIIA	U10426 x A75-103019
-64065	86 PIIIA	" x "
-64067	86 PIIIA	" x "
-64069	86 PIIIA	" x "
-66021	86 PIIA	Nebsoy x Amsoy 71
-68010	86 PIIA	A75-203036 x L74D-674
-68085	86 PIIA	Nebsoy x Williams
-70015	86 PIIIA	Hodgson x U66434
-70023	87 PIIIB	" x "
-72018	86 PIIIA	Nebsoy x Woodworth
-72078	86 PIIIA	" x A74-203002
-73076	86 PIIIA	" x Williams
-74040	86 PIIIA	Wells II x Mead
-75056	86 PIIA, 87 II	Hodgson x DeSoto
U84-62077	87 PIIA	U59245 x Century
-64041	87 PIIA	Williams x U57141
-64045	87 PIIA	" x "
-65078	87 PIIA	* A75-305031 x Mead
-67078	87 PIIIA	* " x U10727
-70098	87 PIIIA	Nebsoy x L70T-543G
U85-63023	88 PI, 89 II	" x Mead

U85-64055	88 PIIA, 89 II	U46762 x C1514
-66042	88 PI	Wells II x Williams 79
-68023	88 PIIA	Platte x Asgrow A3127
-68024	88 PIIA	" x "
-71073	88 IIIA	" x "
-71074	88 IIIA	" x "
-71084	88 IIIA, 89 III	" x "
-71088	88 IIIA	" x "
-74089	= Dunbar	" x "
U8662002	89 IIIB	A78-324002 x Hobbit
U8662005	89 IIIB	" x "
U8662062	89 IIIB, 90 III	K1047 x Mead
U8669091	89 IIIB	U75680 x Lakota
U8671056	89 PIIB	U86413 x Nebsoy
U8674012	89 PIIB	A78-323019 x U20325
U8761020	89 PIIB	Nebsoy x Jogun
U8761026	89 PIIB	" x U75326
U8761042	89 PIIB	Asgrow A3127 x U76168
U8763041	89 PI, 90 II	Sherman x Harper
U8765073	89 PIIB	A80-250034 x Century
U8765087	89 PIIB	" x "
U8770014	89 PIIB	" x "
U892035	90 PIIB	SG1/BC/85-E1 (Crop Sci. 25:717)
U892203	90 PIIB	Hack x A80-244036
U892213	90 PIIB	BSR 101 x C1626
U892215	90 PIIB	" x "
U892220	90 PIIB	" x "
U892301	90 PIIB	LN80-9359 x Platte
U892305	90 PIIB	Century x Harosoy
U892317	90 PIIB	BSR 101 x Century 84
U892325	90 PIIB	" x "
U892327	90 PIIB	A82-161035 x C1626
U892404	90 PIIB	Mead x K1074
U892420	90 PIIB	SG1/BC/85-E1 (Crop Sci. 25:717)
U892431	90 PIIB	"
U893018	90 PIIB	Hobbit x HC78-676
U893020	90 PIIB	" x "
U893025	90 PIVB	" x Harosoy
U893029	90 PIVB	SG1/BC/85-E1 (Crop Sci. 25:717)
U893032	90 PIIIB	"
U893037	90 PIIIB	"
U893203	90 PIIIB	Hobbit x U76168
U893205	90 PIIIB	Winchester x A80-244036
U893217	90 PIIIB	Sherman x Harper
U893229	90 PIIIB	A80-345005 x Century 84
U893405	90 PIIIB	Winchester x HC79-478
U893809	90 PIIB	Hobbit x Platte
U893810	90 PIVA	" x "
U893907	90 PIVA	Winchester x HC79-478
U893915	90 PIIIB	Hack x Mead PR

U893925	90 PIIIB	Hack x Mead Pr
U893937	90 PIIIB	Winchester x K1075

UD: Delaware A.E.S.

UD2	59 PIV	FC 33.243 x Wabash
UD29-13	58 PIV	" x "
UD36	59-60 PIV	" x "
UD53	59 PIV	" x "
UD74-9	58 PIV	" x "
UD217	60 PIV	Hawkeye x FC 33.243
UD277-7	59 PIV	" x "
UD288	59 PIV	" x "
UD290	59 PIV	" x "
UD295-12	58 PIV	FC 33.243 x Hawkeye
UD297-6	58 PIV, 59 IV	" x "
UD315	60 PIV	" x Perry
UD321-5	= Bethel (1961)	" x "
UD333	60 PIV	" x "
UD338	60 PIV	" x "
UD356	59 PIV	" x "
UD385	61 PIV	" x "
UD470	62 PIII	Adams x FC 33.243
UD475	62 PIII	" x "
UD485	62 PIII	" x "
UD523	59 PIV	C985 x FC 33.243
UD545-1-1	59 PIV	" x "
UD579	59 PIV	" x "
UD580-10	58 PIV, 59 IV	FC 33.243 x C985
UD672	= Delmar (1963)	C799 x FC 33.243
UD716	60 PIV	L48-7289 x FC 33.243
UD769	60 PIV	" x "
UD1020-8-2	63 PIV	FC 33.243 x D49-2491
UD1112-9-1	63 PIV	" x "
UD3210-31-14	= Verde (1967)	Aoda x A50-7445

#### Year-Line Numbers:

UD65-9105	68 PIV
-9115	68 PIV
-9137	68 PIV
-9140	68 PIV
UD66-7653	68 PIV
-9222	71 PIV
-9428	68 PIV
-9775	68 PIV

Bethel x Kent	" x "
	" x "
	" x "
Delmar x	"
Bethel x	"
	" x "
	" x "

UM: University of Manitoba, Winnipeg

UM55-2	58-61 00	Pagoda 2 x Holmberg 201-14-18
UM56-1	58 00	" " x " "
UM3	59 P00	from PI 194.630 from Sweden in 1951
UM4	= Portage (1964)	Acme x Comet
UM5	59 P00, 60-62 00	" x "
UM6	60 P00, 61 00	Blackhawk x PI 194.633
UM7	60 P00, 61-62 00	" x "
UM8	60 P00, 61 00	M10 x PI 194.633
UM9	62 P00	" x "
UM10	62 P00	" x "
UM11	62 P00	Blackhawk x PI 194.633
UM12	62 P00	O52-903 x Flambeau
UM13	62 P00, 63 00	" x "
UM14	63 P00, 64 00	" x "
-I	65 00	" x "
-P	65 00	" x "
UM15	= Altona (1966)	* Flambeau <u>x</u> 052-903
UM16	64 P00	Acme x Comet
UM17	64 P00	Crest x Flambeau
UM18	65 P00	O52-903 x Flambeau
UM19	65 P00, 66 00	Crest x Flambeau
UM20	66 P00, 6700	" x Chippewa

V: Virginia A.E.S.

V78-1175	81 PIIIB, 82 PIV	Essex x Williams
-1199	81 PIIIB, 82 PIV	" x "
V79-2881	83 PIV	Hodgson x Essex
V80-174B	83 PIV, 84 IV	" x "
V81-1185	84 PIVA	Bay x SRF 400
V82-885	86 PIVA	Essex x V71-793
V84-579	87 PIV	Will x Md71-583

W: Wisconsin A.E.S.

W1	44 II	Dunfield x Illini
W417	80 PI	Merit x (Hawkeye x Manchu 3)
W442	80 PI	Evans x Steele
W837-4	45 O	unknown
W10186	85 PI, 86-87 I	Salut 216 x Amurskaja 41

Year-Line Numbers:

W44-610	47 P0, 48 0	Richland x Kabott
-623	46-47 0	" x "
-631	47 P0, 48 0	" x "
-2115	49 P0, 50-51 0	Lincoln(2) x Richland
-3190	48 PI, 49-51 I	" " x "
-4018	48 PI, 49 I	" " x "
W45-2070 *	47-48 P0	Mukden x Kabott
-2175	47 PI, 48 I	Mandarin x L36-12
-2260	47 PI, 48 P0, 49-50 0	Ontario x Richland
-2306	47 PI	Lincoln x "
-2307	47 PI, 48 I	" x "
-3346	48-49 PI, 50 I	" (2) x "
-3372	48-49 PI, 50-51 II	" " x "
-3633	48 PI, 49-50 I	" " x "
-3638	47 PI, 48-49 I	Lincoln x "
W45S-4123	47 P0	Richland x Kabott
-4135	47 P0	" x "
-4141	47 P0	Kabott x Goldsoy
-4142	47 P0, 48 0	" x "
-4143	47 P0, 48 0	Mukden x Pagoda
-4149	47 P0	Lincoln x "
-4167	49 P0	" x Seneca
W46-1787	49 PI	Lincoln(2) x Richland
W46S-199	49 P0	Habaro x Goldsoy
-246	50 0	Lincoln x Pagoda
-283	49 P0	" x Kabott
-292	= Grant (1955)	" x Seneca
-326	48 P0, 49 0	" x Pagoda
-338	48 P0	" x "
-339	48-49 0	Cayuga x Kabott
-341	48 P0, 49-50 0	" x "
-441	48 P0	Lincoln(2) x Richland
-457	48 P0	" " x "
W47S-727	49 P0	Seneca x Mandarin
-955	49 P0	Cayuga x Kabott
W48-1028	50-51 II	Lincoln x Manchu 606
W48S-1019	50-51 0	Kabott x Chief
-1025	50 I	Lincoln x Pagoda
-1035	50 I	" x "
-1200	50-52 0	Richland x Flambeau
-1460	= Norchief (1954)	Hawkeye x "
W49-1454	56 PI	" x "
-1486	54 PI	" x "
-1982	52 I, 53 II	A43-108 x Manchu 3
-1982-1	56 PI	" x " "
-16	56 PII	" x " "
-32	56 PI, 57-59 I	" x " "
-2024	54 PI, 55 PII	Hawkeye x Flambeau
W49S-2703	53-57 0	Lincoln x "

W50S-3138	53-56 0	Hawkeye x Flambeau
-3147	54-56 0	Mukden x "
-3180	53-56 0	" x "
-3257	54-56 0	" x "
-3334	53 0	Lincoln x "
-3386	53-56 0	" x "
W51-2118	58 PII	Hawkeye x Manchu 606
W53-1069	58 PII, 59 II	Lincoln x Capital
W57-2086	61 PII	Hawkeye x Seneca
-2155	62 PI	Blackhawk x "
-2160	61 PII	" x "
-2300	61 PI	Seneca x W49-1982-32
-2305	61 PII	" x "
-2330	62 PI	" x Chippewa
-2334	61 PI, 62 I	" x "
-2420	62 PII	" x W49-1982-32
-2463	61 PI	" x "
W61-4120	64 PI	Norchief x Clark
-4221	= Dunn (1969)	Grant x Chippewa
-4224	64 PI	" x "
-4243	64 PII, 65-66 II	Blackhawk x Seneca ?
W61S-114	63 PO	Norchief x Clark
-191	63 PO, 64-65 0	" x "
-217	63 PO	" x "
-264	63 PO	" x Harosoy
-294	63 PO, 64-65 0	" x "
-311	63 PO	" x "
W63-1010-3	66 PI, 67 I	Seneca x Chippewa
-4279	66 PI	Chippewa x Seneca
-4391	66 PI	" x "
-4445	67 PI, 68 I	" x "
-4731	66 PI, 67 I	Seneca x Norchief
-4905	66 PI	Hardome x Chippewa
-4994	66 PI	" x "
-4997	67 PI	" x "
-5102-20	66 PI	W50S-3386 x Clark
W63S-164	66 PO	Seneca x Chippewa
-177	66 PO, 67-68 0	W50S-3386 x Clark
-179	67 PO, 68 0	" x "
-184	67 PO, 68-69 0	" x "
-199	66 PO	Hardome x Chippewa
-236	66 PO, 67-68 0	W50S-3386 x Clark
W64-3351	66 PI, 67 I	W49-1982-32 x Chippewa
-3518	67 PI	C1128 x Hardome
-3561	67 PI	" x "
-3656	67 PI, 68 I	" x "
W64S-190	66 PO	Seneca x Chippewa
-192	66 PO	" x "
-202	67 PO, 68-69 0	Hardome x Chippewa
-206	66 PO	Seneca x W50S-3386

W64S-209	66 P0, 67-68 0	Seneca x W50S-3386
W66-3394	69 PI	C1128 x M319
-3445	69 PI, 70 I	" x "
-3487	69 PI	" x Merit
-3500	69 PI	" x "
-3523	69 PI	" x "
-4108	69 PI, 70 I	Merit x W49-1982-32
W67-184	71 PI	W57-2334 x Chippewa 64
-186	71 PI, 72 I	" x " "
-193	71 PI	" x " "
W68-7	71 PI	" x " "
-9	71 PI	" x " "
-37	71 PI, 72 I	" x " "
W87-11	89 PI, 90 I	Hodgson 78 x Wells II
-14	89 PI	* " " x " "
-15	89 PI, 90 I	* " " x " "
-23	89 PIIA	* " " x " "
-211	89 PIIA	Wayne x L78-189

#### Miscellaneous

Blend 1	56 II, 56 III	50% A50-8618-1 + 50% Shelby
Blend 2	71 PII, 72 II	25% Amsoy 71 + 75 % Corsoy
Dimmock Mandarin	43 I	from Mandarin (Ag. Canada,Ottawa)(=Mandarin (Ottawa))
Illini sel.	40 III	from Illini (probably Illinois A.E.S.)
Manchu 831	= Manchukota (1943)	from Manchu (South Dakota A.E.S.)
Mandarin Rogue	48 PI	from Mandarin (Iowa A.E.S.)
McRostie Mandarin	42-43 I	from Mandarin (Ag. Exp. Farm,Winnipeg, Man.)
Mukden No. 4	43 II	from Mukden (Wisconsin A.E.S.)
Wis. Manchu 3 sel.	42-43 II, 43 I	from Manchu 3 (Wisconsin A.E.S.)
Wis. Manchu 839-14	= Flambeau (1944) *	introduced from U.S.S.R. (Wisconsin A.E.S.)

Experimental Strains with Designations Derived from Variety Names

<u>Strain</u>	<u>Test</u> (or variety name and year of release)	<u>Parentage</u> (* = incorrect in the U.T. Report)
<b>A: Iowa A.E.S.</b>		
ABSR 101BC	= Archer (1990)	* ( <u>BSR101(5) x Williams 82,Rps1-k</u> ) x [ <u>BSR101(5) x (Harosoy x Altona,Rps6)</u> ]
Corsoy R3 or A75-Corsoy R3	= Vickery (1978)	* Corsoy(5) x (L65-1342 x Mack, or Anoka x Mack, <u>Rpsl-c</u> )
Elgin BC or A Elgin BC	= Elgin 87 (1987)	Elgin(5) x Williams 82, <u>Rpsl-k</u>
A Hardin BC(k)	= Hardin 91 (1991)	Hardin(5) x " " "
A Hardin BC(6)	90 I	Hardin(5) x PRX54-33-2(Harosoy x Altona, <u>Rps6</u> )
Harper BC or A Harper BC	= Harper 87 (1987)	Harper(6) x Williams 82, <u>Rpsl-k</u>
Weber BC	= Weber 84 (1985)	Weber(5) x Century, <u>Rpsl</u>
<b>AHW: Iowa A.E.S. and Ohio A.R.D.C.</b>		
AHW Pella BC	= Pella 86 (1986.)	Pella(5) x Williams 82, <u>Rpsl-k</u>
<b>C: Purdue (Indiana) A.E.S.</b>		
Amsoy 71 BC6 (from 5th backcross)	82 II	Amsoy 71(6) x (PI 86.972-1, <u>Rps3</u> x PI 84.637, <u>Rpsl-b</u> )
C Beeson PR3	= Beeson 80 (1979)	Beeson(8) x Arksoy, <u>Rpsl-c</u>
Beeson 80 BC6	= Keller (1983)	Beeson 80(7) x PRX9-249(PI 86.972-1, <u>Rps3</u> x PI 54.615-1)
Cumberland BC	83 III	Cumberland(7) x (PI 86.972-1, <u>Rps3</u> x PI 84.637, <u>Rpsl-b</u> )
Oakland BC	83 PIIIA	* Oakland(7) x (PI 86.972-1, <u>Rps3</u> x PI 84.637, <u>Rpsl-b</u> )
C-Union BC	= Regal (1986)	Union(8) x (PI 86.972-1 x PI 84.637, <u>Rpsl-b hm</u> )
Wells BC6 or Wells BC7-19-1	= Wells II (1978)	* Wells(8) x Arksoy, <u>Rpsl-c</u>
Wells II BC6	= Miami (1984)	Wells II(7) x PRX9-274(PI 86.972-1, <u>Rps3</u> x PI 54.615-1)
Williams BC6	= Winchester (1984)	Williams(7) x PRX12-112(PI 86.972-1, <u>Rps3</u> x PI 84.637, <u>Rpsl-b</u> )
Woodworth BC5	82 III	* Woodworth(6) x (PI 86.972-1, <u>Rps3</u> x PI 84.637, <u>Rpsl-b</u> )

Ohio A.R.D.C.

HC Amcor	= Amcor 89 (1989)	Amcor(6) x Williams 82, <u>Rpsl-k</u>
HC Elf BC	86 III	Elf(6) x Williams 82, <u>Rpsl-k</u>
HC Elf-EB	90 PIVB	Elf(6) x Williams 82, <u>Rpsl-k</u>
Gnome <u>Rpsl-k</u> or HC Gnome <u>Rpsl-k</u>	= Gnome 85 (1985)	Gnome(6) x Williams 82, <u>Rpsl-k</u>
HC Hobbit BC	= Hobbit 87 (1987)	Hobbit(6) x Williams 82, <u>Rpsl-k</u>
HC Sprite BC	= Sprite 87 (1987)	Sprite(7) x Williams 82, <u>Rpsl-k</u>

OX: Agriculture Canada, Harrow

OX Hodgson 1c Hm = Haroson (1987)

Hodgson(3) x M75-2{Hodgson(4) x [M67-141 x  
(Chippewa x Higan,Rpsl-c)]}

Other:

Dimmock Mandarin 43 I

Illini sel.	40 III	from Mandarin (Ag. Canada,Ottawa) (=Mandarin (Ottawa))
Manchu 831	= Manchukota (1943)	from Illini (probably Illinois A.E.S.)
Mandarin Rogue	48 PI	from Manchu (South Dakota A.E.S.)
McRostie Mandarin	42-43 I	from Mandarin (Iowa A.E.S.)
Mukden No. 4	43 II	from Mandarin (Ag. Exp. Farm,Winnipeg, Man.)
Wis. Manchu 3 sel.	42-43 II, 43 I	from Mukden (Wisconsin A.E.S.)
Wis. Manchu 839-14	= Flambeau (1944)	from Manchu 3 (Wisconsin A.E.S.)

\* introduced from U.S.S.R. (Wisconsin A.E.S.)

## INDEX OF NAMED VARIETIES IN THE 1939 TO 1990 NORTHERN UNIFORM TESTS

<u>Variety</u>	<u>Prior Designation</u>	<u>Tests</u>
A-100		62-67 I, 62 II
† Acme	O 17 or P-17	49 P0, 50 0, 58-65 00
† Ada	M61-60	69 P00, 70-72 00
† Adams	A45-2683	47-62 II, 47-52 III
† Adelphia	C1225	60-61,66-68 III
† Altona	UM15,S59-377	63 P00, 64-79 00, 77-79 0
† Amcor	L73D-195	75 PII, 76-80,88 II
† Amcor 89	HC Amcor	88 II
† Amsoy	A61-939	63-69 II
† Amsoy 71	CX407BC7-50,-53, -310, + -326	70-77,82 II
Anderson	now FC33.243	49 III, 50 IV
† Anoka	M54-160	65 PI, 66-69 I
† Archer	ABSR 101BC	89 I, 90 II
† Bass	Md83-2048	86 PIVB, 87-89 III
Bavender Special		46-49 II
† Beeson	C1429	66 PII, 67-79 II, 77-78 III
† Beeson 80	C Beeson PR3	78-79,82 II
† Bell	LN85-874	88 PI, 89-90 I
Bellatti	L-263 LAcc 263	65 IV
† Bert	M83-899	87 PI, 88-90 I
† Bethel	UD321-5	58 PIV, 59-62 IV
† Bicentennial	OAC81-2	83-86 00
† Blackhawk	A46K-937	48-63 I, 48-59 II
† Bonus	C1474	68 PIV, 69-74 IV
† Boone	PI 54.563-3	39-45 IV
† Brock	ORC8803	89 PI, 90 I
† BSR 101	A80-149020	82 PI, 84-87,89 I, 83-85 II, 86 PIIA +B
† BSR 201	A78-227013	80-84,87 II
† BSR 301	A75-302005	76 PIII, 77-78 III
† BSR 302	A76-304019	77,83 PIII, 78-80 III
† Burlison	LN82-9648	86 PII, 87-90 II, 89-90 III
† Calland	C1437	66 PIII, 67-77 III
Capital		46-58 0
Carlin		48 III, 49 IV
† Cartter	L80-3049	83 PIIIB, 84,88-89 III
Cayuga	PI 65.393	42 I
† Century	C1545	76 PII, 77-84 II, 79-84 III
† Century 84	HW8185	82-87 II, 85-87 III, 88 PIIIA +B
† Chamberlain	LN80-8478	83 PIV, 84-87 III, 86-87 IV
† Chapman	HM8625	87 PIIB, 88 III, 89-90 II
† Chico	M74-355	83 0, 84-85 00
Chief	T119	40-53 III, 40-57 IV

<u>Variety</u>	<u>Parentage</u>
A-100	rogue in Capital, Anderson Seed Store, Minnesota
† Acme	from Pagoda
† Ada	Merit x Norman
† Adams	Illini x Dunfield; from A43-176
† Adelphia	C1070 x Adams
† Altona	* Flambeau <u>x</u> 052-903
† Amcor	Amsoy 71(C1477) x Corsoy
† Amcor 89	Amcor(6) x Williams 82, <u>Rpsl-k</u>
† Amsoy	Adams x Harosoy; from AX56P64-1
† Amsoy 71	Amsoy(8) x C1253, <u>Rpsl</u>
Anderson	farmer selection from Lincoln
† Anoka	* Korean <u>x</u> M42-37(Lincoln(2) x Richland)
† Archer	* <u>(BSR 101(5) x Williams 82,Rpsl-k) x [BSR 101(5)</u> <u>x PRX54-59(Harosoy x Altona,Rps6)]</u>
† Bass	BSR 301 x Essex
Bavender Special	Mukden x a North Carolina variety
† Beeson	C1253 x Kent
† Beeson 80	Beeson(8) x Arksoy, <u>Rpsl-c</u>
† Bell	Fayette x LN80-10398
Bellatti L-263	from Bavender Special
† Bert	M74-270 x A78-123018
† Bethel	FC 33.243 x Perry
† Bicentennial	* Fiskeby V(PI 360.955) <u>x</u> Harosoy 63
† Blackhawk	Mukden x Richland; from A43K-884
† Bonus	C1266R x C1253
† Boone	introduced from Liaoning, China
† Brock	Pride B152 x HW8039
† BSR 101	L69U40-16-4 x A76-304020
† BSR 201	* <u>Pride B216 x AX901-40-2</u>
† BSR 301	L15 x AP68-1016
† BSR 302	(Beeson x AP68-1016) x (L15 x Calland)
† Burlison	K74-113-76-486 x Century
† Calland	C1253 x Kent
Capital	Strain 171 x A.K. (Harrow)
Carlin	rogue in Dunfield
† Cartter	Williams(2) x PI 88.788
Cayuga	introduced from Heilongjiang, China
† Century	Calland x Bonus
† Century 84	Century(5) x Williams 82, <u>Rpsl-k</u>
† Chamberlain	A76-304020 x Land O Lakes Max
† Chapman	* A79-236002(3) x HW79149
† Chico	[Evans x (Merit x Lee)] x (M65-69 x M65-227)
Chief	Illini x Manchu A(T95)

<u>Variety</u>	<u>Prior Designation</u>	<u>Tests</u>
† Chippewa	L46-8275	48 PI, 49-65 I, 52-57 0
† Chippewa 64	L1	62-73 I
† Clark	L49-5138	51-65 IV, 52-59 III
† Clark 63	SL1	62-69 IV, 70-72 PIV
† Clay	M393, or II-54-53	64 PO, 65,67-80 0, 66,77-90 00
† CN210	L76-141B	83 II (L76-141 in 78-79 PII)
† CN290	L76-129B	83 II (L76-129 in 78-79 PII)
† Coles	A73-128	74 PI, 75-78 I, 77-78 II
† Columbus	K62-7221	64 PIV
† Comet	048-36	51-56 0
† Conrad	A83-273009	84 PIIA, 85-87 II
† Corsica	Md85-5443	88 PIVB, 89-90 IV
† Corsoy	A61-439	63 PII, 64-79 II, 77-79 I
† Corsoy 79	L75-3674	77,84 PII, 78-83 II, 80-83 I
† Crawford	K1019	75 PIV, 79 IV
Crest 0-51-31	8+322	58-60 00
† Cumberland	A74-303012	75 PIV, 76-83 III
† Custer	S5	66-67 IV
† Cutler	C1278	62 PIV, 63-71 IV
† Cutler 71	C1481	69-77 IV, 77 III
Cypress No. 1	50 PIV,	51-52 III
† Dassel	M75-25	82-85 0
† Dawson	M70-128E	81-88 0, 86-88 I
† Delmar	UD672	59,61 PIV, 66 IV
† Delsoy 4210	S85-1084	87 PIV, 88-90 IV
† Delsoy 4500	S83-1004	86 PIVA, 87-90 IV
† DeSoto	K1024	76 PIV, 77-79 IV
† Disoy	AX80-21	65-66 I
† Douglas	K1033	77 PIV, 78-86 IV
† Dunbar	U85-74089	88 PIIIA, 89-90 III
Dunfield	PI 36.846	39-47 II, 40-57,87-89 III
† Dunn	W61-4221	64 PI, 65-69 I
† Earlyana	C28,CX931-1	40-52 II, 42-56 I
Early White		44-45 0
Eyebrow		
† Edison	HM8597	87 PIIIB, 88-90 III
† Elf	L74D-611	76-79,86 III
† Elgin	A79-133019	81-86 II, 84-86 I
† Elgin 87	(A) Elgin BC	85-88 II, 87-88 I
† Erie	HM8735	88 PIIB, 89-90 II
Essex	V66-180	77-79 IV
† Evans	M61-96	69 P0, 70-85 0, 77-85 I
Fabulin		52 III
† Fayette	L78-1444	81-85 III

<u>Variety</u>	<u>Parentage</u>
† Chippewa	Lincoln(2) x Richland
† Chippewa 64	Chippewa(8)x Blackhawk, <u>Rpsl</u>
† Clark	Lincoln(2) x Richland
† Clark 63	(Clark(5) x L49-4091, <u>rxp</u> ) x (Clark(6) x Blackhawk, <u>Rspl</u> )
† Clay *	Renville <u>x</u> Capital
† CN210	Beeson x L70-2283
† CN290	Beeson x L70-2283
† Coles	* Hark x [Provar x (Disoy <u>x</u> Magna)]
† Columbus	C1069 x Clark
† Comet	Pagoda x Mandarin (Ottawa)
† Conrad	Asgrow A3127 x Tri-Valley Charger
† Corsica	Essex x Harper
† Corsoy	Harosoy x Capital; from A58-932
† Corsoy 79	Corsoy(6) x Lee 68, <u>Rpsl-c</u>
† Crawford	Williams x Columbus
Crest	F8-291 x Mandarin(Ottawa)
† Cumberland	Corsoy x Williams
† Custer	* {(Scott(4) <u>x</u> Peking)(3) x <u>i-i</u> <u>Rhg4</u> (Scott(2) <u>x</u> Peking)} x (Scott(9) x Blackhawk, <u>Rpsl</u> )} x (Scott(5) <u>x</u> Peking)
† Cutler	C1069 x Clark
† Cutler 71	Cutler(4) x <u>SL5,Rpsl</u>
Cypress No. 1	rogue in Korean
† Dassel	Evans x M66-18
† Dawson	Evans x M63-217Y
† Delmar	C799 x FC 33.243
† Delsoy 4210	* <u>L77-1233</u> x <u>Douglas</u>
† Delsoy 4500	Cumberland x Forrest
† DeSoto	L66L-140 x Columbus
† Disoy	A50-6838(Mandarin (Ottawa) x Kanro) x A50-7537(Richland x Jogun)
† Douglas	Williams x Calland
† Dunbar	Platte x Asgrow A3127
Dunfield	introduced from Jilin, China
† Dunn	Grant x Chippewa
† Earlyana	rogue in Dunfield
Early White	probably = White Eyebrow from Jilin, China
Eyebrow	
† Edison	HW79116 x HW79022
† Elf	Williams x Ransom
† Elgin	AP6 (Crop Sci. 15:739, 1975)
† Elgin 87	Elgin(5) x Williams 82, <u>Rpsl-k</u>
† Erie	* A78-123018(2) x Century 84
Essex	Lee x S55-7075
† Evans	Merit x Harosoy
Fabulin	rogue in Lincoln
† Fayette	Williams(2) x PI 88.788

<u>Variety</u>	<u>Prior Designation</u>	<u>Tests</u>
† Flambeau	Wis. Manchu 839-14 or Wis. 839-14	43 I, 44-56,58-59 0, 58-71 00
† Flyer	HM8469	85 PIV, 86-90 III, 87-90 IV
† Ford	A50-8618-2	56-59 II, 56-64 III
Franklin	L71L-436	78 PIV, 79-85 IV
† Fremont	U76360	82 PIIIB, 83 III
† Gibson	C169	39-49 IV
† Glenwood	M74-12	81-83,85-90 0, 89-90 I
† Gnome	HW74-618 or L74D-618	76,80 PII, 77 PIII, 78-79,81-84 II
† Gnome 85	(HC) Gnome Rps1-k 42-43 I, 44-48 0	83 PIIB, 84-85 II
Goldsoy	HM8473	85 PIIIA
† GR8836	HM8486	85 PIIIA
† GR8936	M65-295	73 P0, 74-76 0
† Grande	W46S-292	49 P0, 50-69 0, 55-56 I
† Grant	PI 20.405	39 II, 42-52 I
Habaro	LN78-1136	81 PIIB, 82-84 II
† Hack	LN82-2366	85 PIVA, 86-89 IV
† Hamilton	OX271	73 PII, 74-79 II
† Harcor	A76-102009	77 PI, 78-80,83-88,90 I, 80,83-84,86-88 II
† Hardin	A Hardin BC(k)	90 I
† Hardin 91	03-33	52-56 0
† Hardome	A61-540	63 PI, 64-76 I
† Hark	OX643	72 PI, 73-78 I
† Harlon	1B/41	48 PI, 49-50 I
Harly		44-45 II
Harman		86 PI
† Haroson	OX Hodgson 1cHm	51-67 II
Harosoy	3-23/45	61-68 II
† Harosoy 63	L59g-1R	81-86 III
† Harper	A79-336014	85-87 III
† Harper 87	(A) Harper BC	67 PII, 68 II
† Harwood	0-378-28	47-64 II, (sublines in 46 II)
† Hawkeye	A44-107-4,-5,-7, -12 + A44-108-12	60-65 II
† Hawkeye 63	L59g-2R	85 PIIIA
† Hayes	HM8482	58-59 II
† Henry	H21793-7	77 PIII, 78-86 III
† Hobbit	HW74-3385	86-90 III
† Hobbit 87	HC Hobbit BC	72-77 I, 77 0
† Hodgson	M63-217Bf	77-85 I, 78-86 0
† Hodgson 78	M75-1	
Hokien	50-52 0	
† Hoyt	HC78-523	81,87 PIIB, 82-86,88 II
† IA 2007	A87-297015	88 PIIA, 89-90 II
† IA 2008	A87-196014	88 PI, 89-90 II

<u>Variety</u>	<u>Parentage</u>
† Flambeau	* introduced from USSR, not from 'Manchu'
† Flyer	* Asgrow A3127(4) x Williams 82(L24), <u>Rpsl-k</u>
† Ford	Lincoln(2) x Richland
Franklin	L12 x Custer
† Fremont	Williams x Amsoy 71
† Gibson	* Dunfield x Midwest (or reciprocal?)
† Glenwood	Evans x Peterson 85
† Gnome	Williams x Ransom
† Gnome 85	Gnome(6) x Williams 82, <u>Rpsl-k</u> from OAC 211
Goldsoy	Asgrow A3127(4) x Williams 82(L24), <u>Rpsl-k</u> ,
† GR8836	Asgrow A3127 x Williams 82(L24)
† GR8936	Anoka x Magna
† Grande	Lincoln x Seneca
† Grant	introduced from Siberia, USSR
Habaro	L70T-543G x K1028
† Hack	Sprite x L75-3632
† Hamilton	Corsoy x OX383(Corsoy x Harosoy 63)
† Harcor	Corsoy(3) x Cutler 71
† Hardin	Hardin(6) x Williams 82, <u>Rpsl-k</u>
† Hardin 91	Mandarin (Ottawa)(2) x A.K. (Harrow)
† Hardome	Hawkeye x Harosoy
† Hark	Blackhawk x Harosoy 63
† Harlon	Mandarin (Ottawa) x A.K. (Harrow)
Harly	from Manchu
Harman	Hodgson(3) x M75-2, <u>Rpsl-c</u>
† Haroson	Mandarin (Ottawa)(2) x A.K. (Harrow)
Harosoy	Harosoy(8) x Blackhawk, <u>Rpsl</u>
† Harosoy 63	* unknown
† Harper	Harper(6) x Williams 82, <u>Rpsl-k</u>
† Harper 87	Harosoy 63(L59-738) x C1270
† Harwood	Mukden x Richland
† Hawkeye	
† Hawkeye 63	Hawkeye (7) x Blackhawk, <u>Rpsl</u>
† Hayes	Amcor x Williams 82(L24)
† Henry	Richland x H2
† Hobbit	Williams x Ransom
† Hobbit 87	Hobbit(6) x Williams 82, <u>Rpsl-k</u>
† Hodgson	Corsoy x M372
† Hodgson 78	Hodgson(7) x Merit, <u>Rpsl</u>
Hokien	unknown; similar to Capital
† Hoyt	Harcor x Elf
† IA 2007	Pride B152 x A80-244003
† IA 2008	* BSR 101 x A80-244003

<u>Variety</u>	<u>Prior Designation</u>	<u>Tests</u>
Illini	A.K. 3	39-47 II, 40-56 III
† Jack	LN83-3824-1	88 PIIIA, 89-90 II
Kabott		42-43 I, 44-48 0
Kagon		44-45 0
Kanrich	A50-5039	58 PII, 71 PIII, 72 III
† Kasota	M82-106	86 PI, 87-89 I
† Kato	M81-382	85 PI, 86-88 I
† Keller	Beeson 80 BC6	82 II
† Kent	C1068	53 PIV, 54-76 IV
† Kenwood	A85-291001	86 PII, 87-90 II
Kim	A50-4745	58 PII
Kingwa	Pekwa	39 IV
Korean	Early Korean	47-48 II
† Lakota	A77-112023	78 PI, 79-82 I, 81-82 II
† Lawrence	L74L-125	77 PIV, 78-82 IV
† Leslie	M83-108	87 PI, 88-90 I
† Lincoln	L36-685	40-57 II, 42-59 III, 47 PIV
† Lindarin	C1117	54,56 PI, 55 PII, 56-64 II
† Lindarin 63(BC4)	C1294R	62-63 II (C1294 in 61 II)
† Lindarin 63	C1315	63-67 II
Linford	L82C-1246	90 III
Linman 533	39-41 II	
† LN83-2356	LN83-2356	86 PIVA, 87 IV
† Logan	U75633	81 PIIB, 82-83 III
Macoupin	40-45 IV	
† Madison	H20771-9	58-59 II
† Magna	AX84-90	65-66 II, 71 PII
Manchu, Hudson		39 II
Manchu, Montreal		44-49 0
Manchu, Wisconsin		39 II
Manchu 3	Wis. Manchu 3	40-42,44-45 II, 43-48 I
Manchu 606	Wis. Manchu 606	40-43 II, 42-45 I
† Manchukota	Manchu 831	42-45 I
Manchuria 13177	Ohio 13177	40-41 III
Mandarin	PI 36.653	39 II, 42-43 I
Mandarin (Ottawa)	Dimmock or McRostie	42-59 I, 44-59 0
Mandarin 507	Mandarin	
Mandell	Wis. Mandarin 507	43 I, 44-46 0
† Maple Amber	Purdue No. 2 or MM-35	39-42 II
† Maple Arrow	OT80-1 or Au313	80-85 00
† Maple Donovan	073-15 76 0, 77-82 00	
† Maple Glen	OT83-4 or X921-33-1	84-87 0
	OT84-12 or X973-8-B-4	85-90 00

<u>Variety</u>	<u>Parentage</u>
Illini	from A.K., introduced from China
† Jack	Fayette x Hardin
Kabott	from Heilongjiang, China
Kagon	unknown, from Wisconsin
Kanrich	Kanro(2) x Richland
† Kasota	M73-105 x Vickery
† Kato	M70-127 x Century
† Keller	Beeson 80(7) x PRX9-249(PI 86.972-1, <u>Rps3</u> x PI 54.615-1)
† Kent	Lincoln x Ogden
† Kenwood	Elgin x Asgrow A1937
Kim *	Sac(2) <u>x</u> Richland
Kingwa	rogue in Peking
Korean	introduced from China
† Lakota	AP6M(S1)C1 (Crop Sci. 15:739, 1975)
† Lawrence	Calland x Williams
† Leslie	Hodgson 78 x Pella
† Lincoln	Mandarin x Manchu
† Lindarin	Mandarin (Ottawa) x Lincoln
† Lindarin 63(BC4)	Lindarin(5) x Mukden, <u>Rpsl</u>
† Lindarin 63	Lindarin(8) x Mukden, <u>Rpsl</u>
Linford	* Williams <u>82</u> x Fayette
Linman 533	from Manchu
† LN83-2356	LN78-2714 x HC76-4030
† Logan	* (Beeson x L15) x <u>Amsoy</u>
Macoupin	from Mannoth Yellow
† Madison	Monroe x Lincoln
† Magna	A50-7401[Mandarin (Ottawa) x Jogun] x A50-6838[Mandarin (Ottawa) x Kanro]
Manchu, Hudson	from Manchu, PI 30.593 from Heilongjiang, China
Manchu, Montreal	" "
Manchu, Wisconsin	" "
Manchu 3	" "
Manchu 606	" "
† Manchukota	" "
Manchuria 13177	from variety Manchuria
Mandarin	introduced from Heilongjiang, China
Mandarin (Ottawa)	from Mandarin
Mandarin 507	" "
Mandell	from Manchu
† Maple Amber	Holmberg 840-7-3 x (Haro soy 63 x Altona)
† Maple Arrow	* Harosoy 63 x Holmberg 840-7-3
† Maple Donovan	Maple Arrow x Harcor
† Maple Glen	* BD2 <u>2115-13</u> x Premier

<u>Variety</u>	<u>Prior Designation</u>	<u>Tests</u>
† Maple Isle	OT81-5 or K151-11-B-6	82-83 00
† Maple Presto	BD21117 *	78-83,88-90 00
† Maple Ridge	OT80-12Y or K22-3-B-1	83-90 00
† Marcus	A85-193023	86 PI, 87 I, 88 II
† Marion	A73-227	74 PII
† McCall McClave	M65-217	73-90 00, 80-90 0 41-42 III
† Mead	U36276	78 PIII, 79-80 III
† Merit	055-2065	57 P0, 58-73 0
† Miami	Wells II BC6	82-83 II
† Miles Mingo	Md71-407 Ohio Manchu 1	76-78 IV 40-47 II
† Minnatto Minsoy	M86-2372 PI 27.890	89 0 42-43 I, 44-45 0
† Monroe	H5 or H5S	43-57 I
† Morgan Morse	Md79-5043 PI 19.186	82 PIV, 83-87 IV, 86 III 41-42 IV
† Morsoy Mount Carmel Mukden	CM30 PI 50.523Q	67 P00, 68-72 00 39 IV 39-47 II
† Nebsoy	U11406	76 PII, 77-79 II
† Newton	A87-195032	89 II
† Nile	LS83-5616	88 PIVB, 89-90 IV
† Norchief	W48S-1460	50-65 0
† Norman Norsoy OAC 211	M424	64 P00, 65-75 00 44-45 0 42-43 I
† OAC Libra	OAC82-07	85 0
† Oakland	A74-303013	75 PIII, 76-78 III
† Ontario Ottawa	PI 65.344	39 II, 42-45 I, 44-45 0 62-63 I
† Ozzie Pagoda	M71-43	79-84 0 42-43 I, 44-45 0
† Patoka	PI 70.218-2-19-3	39-51 IV, 40-45 III
† Pella	A74-302012	75 PII, 76-85 III, 79-84 II
† Pella 86	AHW-Pella BC	84 PIIA, 85-86 III
† Pennyrile Pennsoy	Ky79-0237	82 PIV, 88-90 IV 45 II, 46-47 III
† Perry	C612	48-57 IV
† Pershing	S76-2109	78 PIV, 79 IV
† Pixie	L74D-609	76 PIV, 77-85 IV
† Platte	U56355	79 PII, 80-81 II
† Pomona	K1004	72 PIV, 73-74 IV
† Portage	UM4	59 P00, 60-82 00

<u>Variety</u>	<u>Parentage</u>
† Maple Isle	Holmberg 744-2(PI 194.641) x L62-667(2)
† Maple Presto	* (Amsoy x Portage) x Holmberg <u>840-7-3</u>
† Maple Ridge	Fiskeby III(PI 196.491) x Evans
† Marcus	A79-135010 x Asgrow A1937
† Marion	* Amsoy x [Provar x (Disoy x Magna)]
† McCall	M433 x Hark
McClave	farmer selection, similar to Midwest
† Mead	Bonus x Wayne
† Merit	Blackhawk x Capital
† Miami	Wells II(7), x PRX9-274(PI 86.972-1, <u>Rps3</u> x PI 54.615-1)
† Miles	Clark x D64-4731
Mingo	from Manchu
† Minnatto	Evans x PI 437.267(Dobruzanca I)
Minsoy	introduced from France
† Monroe	Mukden x Mandarin
† Morgan	Union x Miles
Morse	introduced from Liaoning, China
† Morsoy	Acme x L48-7289
Mount Carmel	from PI 70.218-2, similar to Patoka
Mukden	introduced from Liaoning, China
† Nebsoy	C1432 x C1430
† Newton	BSR 101 x CN210
† Nile	Forrest x Union
† Norchief	Hawkeye x Flambeau
† Norman	Acme x Hardome
Norsoy	unknown (from a farmer in Minnesota)
OAC 211	from Habaro
† OAC Libra	* FH 31-3 x <u>Evans</u>
† Oakland	L66L-137 x Calland
† Ontario	introduced from Heilongjiang, China
Ottawa	rogue in Chippewa
† Ozzie	Wilkin x M63-217Y
Pagoda	Manitoba Brown x Mandarin
† Patoka	introduced from Heilongjiang, China
† Pella	L66L-137 x Calland
† Pella 86	Pella(5) x Williams 82, <u>Rpsl-k</u>
† Pennyrite	Williams x Essex
Pennsoy	rogue in Manchuria 13177
† Perry	Patoka x L37-1355
† Pershing	D67-3297 x Essex
† Pixie	Williams x Ransom
† Platte	Amsoy 71 x C1421
† Pomona	C1266 x C1265
† Portage	Acme x Comet

<u>Variety</u>	<u>Prior Designation</u>	<u>Tests</u>
† Preston	A81-257031	82 PIIA, 83-84,86 II
Pridesoy		45-46,49 0, 48 PO
Pridesoy 57		48 PO, 49-50 0
† Prize	AX84-98	65-66 II
† Protana	C1376	65 PII, 66-67 II
† Proto	M77-251	85 0
† Provar	A61-1051	63,71 PII, 64-67,72 II
† Pyramid	LS78W-110	82,87 PIV, 83-86,88-89 IV
† Rampage	A62-5405	64 PI, 65-69 I
† RCAT Alliance	ORC 8502	88 PIIB, 89 II
† RCAT Angora	ORC 8801	89 PIIA, 90 II
† RCAT Persian	ORC 8601	88 PIIB, 89 I
† Regal	C-Union BC	84 IV
† Renville	M2	47 PI, 50-52,54-56 I, 51-56 0
† Resnik	HM8471	85 PIII, 86-90 III
Richland	PI 70.502-2	39-57 II, 42-43 I
† Ripley	HC77-2204	81 PIV, 82-90 IV
† Ross	H24157-4	58 PIII, 59-61 III
† S-100		42-46 IV, 47-49 PIV
Scioto		40-43 III
† Scott	S52-7158	57-59,66 IV, 62 PIV
Seneca	FC 03.654A or G	41-42 II
† Shelby	L49-5139	52-67 III, 54-57 II
† Sherman	HW8067	81 PIIB, 82-84 III
† Sibley	M74-62	81 PI, 82-90 I, 87-90 0
† Simpson	M70-153	78-81,83-84 0
Sioux	PI 81.021	42 I
† Sloan	A73-25050	74 PII, 75-78 II
Smith(Smith Super)	now FC 32.176	53 IV
† Sparks	K1041	78 PIII, 79-85 IV, 83-85 III
† Spencer	C1653	84 PIV, 85-90 IV
† Sprite	HW74-3384	77 PIII, 78-80,86 III
† Sprite 87	HC Sprite BC	86 III
† Spry	L83-3804	87 PIV, 88-90 IV
Stafford	V74-315	87 IV
† Steele	M59-213	67 PI, 68-74 I
† Sturdy	M81-384	85 PI, 86-90 II, 87-90 I
† Swift	M59-121	67 PO, 68-77 0
† Traverse	M417	63 I, 64-69 0
† Union	L21	75,78-82 III, 76-82,84 IV
† Vansoy	OAC85	65-67 0
† Verde	UD3210-31-14	66 PIII
† Vickery	A75-Corsoy R3	76 PII, 77-78 II

<u>Variety</u>	<u>Parentage</u>
† Preston	Schechinger S48 x Land O Lakes Max
Pridesoy	unknown, similar to Norsoy
Pridesoy 57	from Pridesoy
† Prize	A50-7401[Mandarin (Ottawa) x Jogun] x A50-6838[Mandarin (Ottawa) x Kanro]
† Protana	CX291-42-1(Mukden x C1069) x CX258-2-3-2(PI 65.338 x C1079)
† Proto	M70-504 x M69-42
† Provar	Harosoy x Clark
† Pyramid	Franklin x J74-5
† Rampage	Clark x Chippewa
† RCAT Alliance	Wells II x Williams 82
† RCAT Angora	Pride B152 x Thompson T8112
† RCAT Persian	M73-62 x FH31-3
† Regal	Union(8) x (PI 86.972-1 x PI 84.637, <u>Rpsl-b hm</u> )
† Renville	Lincoln(2) x Richland
† Resnik	Asgrow A3127(4) x Williams 82(L24), <u>Rpsl-k</u>
Richland	introduced from Jilin, China
† Ripley	Hodgson x V68-1034
† Ross	Monroe x Lincoln
† S-100	rogue in Illini
Scioto	from Manchu
† Scott	D49-2525 x L46-5679
Seneca	introduced from northeast China
† Shelby	Lincoln(2) x Richland
† Sherman	A72-512 x Pella
† Sibley	M68-256 x Hodgson
† Simpson	Steele x Hodgson
Sioux	introduced from Hokkaido, Japan
† Sloan	M59-120 x IVR 4731(Amsoy x Wayne)
Smith(Smith Super)	from Chief by H. W. Smith, W. Frankfort, Illinois
† Sparks	Williams x Calland
† Spencer	A75-305022 x Century
† Sprite	Williams x Ransom
† Sprite 87	Sprite(7) x Williams 82, <u>Rpsl-k</u>
† Spry	L78-8694 x L78L-449
Stafford	V66-318 x V68-2331
† Steele	Blackhawk x Harosoy
† Sturdy	M70-127 x Century
† Swift	* M54-240 x M54-132
† Traverse	Lincoln x Mandarin (Ottawa)
† Union	Williams(5) x SL12, <u>Rpm Rpsl</u>
† Vansoy	(Lincoln x Flambeau) x Goldsoy
† Verde	Aoda x A50-7445
† Vickery	* Corsoy(5) x (L65-1342 or Anoka x Mack, <u>Rpsl(c)</u> )

<u>Variety</u>	<u>Prior Designation</u>	<u>Tests</u>
Viking	T118	43-45 III
† Vinton	A74-201010	75 PI
† Wabash	C463	44 PIV, 45-59 IV
† Wayne	L57-2222	60 PIII, 61-74 III
† Weber	A75-102032	76 PI, 77-79, 82-83 I, 79 II
† Weber 84	Weber BC	82-83 I
† Wells	C1470	68 PII, 69-74, 77-78 II
† Wells II	Wells BC6(from <u>7th</u> BC)	77-79, 82-83 II
† Wilkin	M61-52	69 PO, 70-73 O
† Will	L22	76 PIII, 77-79 III
† Williams	L66L-108	68 PIII, 69-78 III, 77-78 IV, 79 PIV
† Williams 79	L23	77-81 III, 79-81 IV
† Williams 82	L24A	80-85 III, 82-85 IV
† Winchester	Williams BC6	82-83 III
† Wirth	A62-5407	64 PI, 65-69 I
† Woodworth	L66L-172	69 PIII, 70-78, 82 III, 77-78 II
† Wye	Md62-3303-3	68 PIV, 69, 71 IV, (Md62-3303 in 70 PIV)
† Zane	HW8033	81 PIII, 82-86 III, 85-88 II

\* Incorrect in the U.T. Report; the correction is underlined; x signifies that the cross was reversed in the U.T. Report.

† Entered in the Northern Uniform Tests prior to release for commercial production.

<u>Variety</u>	<u>Parentage</u>
Viking	Illini x Manchu A(T95)
† Vinton	Hark x [Provar x (Disoy x Magna)]
† Wabash	Dunfield x Mansoy
† Wayne	L49-4091 x Clark
† Weber	* <u>C1453 x Swift</u>
† Weber 84	Weber(5) x Century, <u>Rpsl</u>
† Wells	C1266R x C1253
† Wells II	* <u>Wells(8) x Arksoy, Rpsl-c</u>
† Wilkin	Merit x Harosoy
† Will	Williams(6) x (Clark(6) x T117, <u>Dt2</u> )
† Williams	Wayne x L57-0034
† Williams 79	Williams(6) x Lee 68, <u>Rpsl-c</u>
† Williams 82	Williams(7) x Kingwa, <u>Rpsl-k</u>
† Winchester	Williams(7) x PRX12-112(PI 86.972-1, <u>Rps3</u> x PI 84.637, <u>Rpsl-b</u> )
† Wirth	Clark x Chippewa
† Woodworth	Wayne x L57-0034
† Wye	2nd cycle intermating of Adams, Lincoln, Perry, Wabash, C799, C985, L46-1503, FC 33.243
† Zane	Cumberland x Pella

## IDENTIFICATION OF PARENT STRAINS NOT IN NORTHERN UNIFORM TESTS

### Experimental Parent Strains from Public Institutions

<u>Strain**</u>	Derived <u>Line Prefix(es)</u>	<u>Parentage</u> (* = incorrect in U.T. Report)
1 YT-75-206013(A)	A	AX739(AP68-1216 x AP68-1016) x AX751(Beeson x AP68-1119)
231-4-5-1 (OT)	OT	(Merit x CM145) x (M62-173 x Holmberg 827-4)
A1	A,HW	Anoka x Mack
A-7 (OT)	DO	Hardome x PI 189.950(Cosse Lisse, France)
A50-6838	A,AX	Mandarin (Ottawa) x Kanro
-7401	AX	" " x Jogun
-7445	UD	Richland x Jogun
-7537	A,AX	" x "
A54-3159	A,AX	Hawkeye x Capital
-3202	AX	" x "
A56-8221	AX	D49-2491(2) x Hawkeye
A59-850	A	A50-6838 x A50-7537
A71-5558-1	Ix	Wirth x AX210-39-2
A72-507BC	A,HM	(A72-507(6) x A1, <u>Rps1-c</u> ) x (A72-507(5) x PI 82.263-2, <u>Rps</u> )
A75D11	A	Amsoy x L61-344
A75D16	A	Hark x Wayne
A77-116023	A	AX990(AX930 x AX965)
-316022	A	" " x "
A78-125026	A	(Beeson x AP68-1022) x Northrup King S1346
-236003	LN	Pride B216 x Cumberland
-326017	A,HA	AX900-4-3 x C1520
A79-331028	A	AX913-5(L15 x AP68-1016) x Oakland
A80-149008	A	C1532 x 1 YT-75-206013
-349006	A	L69U40-16-4 x A76-304020
A81-156013	A	Pride B216 x A77-116013
-156017	A	L69U40-16-4 x A76-304020
-257010	A	A77-116013 x Asgrow A2656
A82-106088	A	* A78-123018 x AP9-81-163103
A83-276024	A	A77-316013 x Hardin
-376026	A	BSR 201 x Asgrow A3127
A85-144015	AC	AP9Fe(S1)C7
AP6	A,AC	population (Crop Science 15:739, 1975)

NOTE: Suffixes on AP6 indicate populations resulting from recurrent selection in AP6, e.g. AP6E(S1)C1 = cycle one from S1 test (early maturity), AP6(2YT)(F4)C1 = cycle one from F4 test (selections made after two years of testing).

\*\*Where non-standard prefixes are used the standard prefix is added in parentheses.

<u>Strain**</u>	<u>Derived Line Prefix(es)</u>	<u>Parentage (* = incorrect in U.T. Report)</u>
AP9-81-163103	A	* <u>population AP9</u> (Crop Science 20:677, 1980) " " " " " "
AP9Fe(S1)	A,AC	population AP14 (Crop Science 21:477, 1981)
AP14-027-2	LS	Harosoy(5) x PI 84.946-2, BSR resistant
AP68-111	AX	Clark(5) x PI 84.946-2, BSR resistant
-315	A,AX	" " x " " "
AP68-1016	A,AX,M	" " x " " "
-1022	A,AX	* " (4) x " " "
-1119	AX	* " <u>(5)</u> x " " "
-1216	A,AX	" (5) x " " "
-1324	AX	D49-2491(4) x AX162-12(Ford x PI 68.708)
AX210-39-2	A	Hawkeye 63 x Kizaya-1
AX248-12-1	A	Wye x (Amsoy x Wayne)
AX860-1	HW	AP68-315 x C1423
AX896-67-3	A	* CX407BC7- <u>326</u> x AP68-1022
AX900-4-3	A	Beeson x AP68-1022
AX901-40-2	A	(AP68-1216 x AP68-1016) x (Beeson x AP68-1119)
AX930	A,AX	(Calland x AP68-1324) x (Steele x AP68-1216)
AX965	A,AX	AX930 x AX965
AX990	AX	AX990 intermated one additional generation
AX1390	A	(Amsoy x Portage) x Holmberg 840-7-3,PI 438.477
BD21115 (OT)	ND	" " x " "
BD22115-13 (OT)	OT	(Calland x Altona) x " "
BK-17-1-4 (OT)	OT	Dunfield x Mandell; natural cross
C11	H	from C985 from Lincoln x Ogden
C1067	C,CX	Mandarin (Ottawa) x Clark
C1270	C,O	Mukden x C1253
C1488	A	<u>fan</u> (low 18:3 fatty acid) selection from
C1640 = T280	C	Century treated with EMS
CX198-H38	HX	Perry x Monroe
CX258-2-3-2	C	PI 65.338 x C1079
CX282-H14	HX	Mukden x Mandarin (Ottawa)
CX291-42-1	C	" x C1069
CX363	K	Kent(8) x Mukden, <u>Rps1</u>
CX405B	K	Lincoln x Ogden
CX407BC7-255	C,CX	* Amsoy(8) x C1253, <u>L2 Rps1</u>
CX414-152	C	Cutler x SL5
CX456-90	C,CX	Amsoy x PI 219.782
CX463-3	C	Cutler x C1311
CX521-71	C	Hawkeye x Harly
CX540-21-1-2-1-2-1-1	C	Harly x PI 80.837
CX557	C	Beeson x PI 68.788
CX588-78	C	Williams x Beeson
CX590-122	C	" x Bonus
CX597-169	C	" x L69L-6-1
CX621-318	C	M61-224 x CX407BC7-255
CX663-37-2-2	C	L72-844C-1 x CX456-90

<u>Strain**</u>	<u>Derived Line Prefix(es)</u>	<u>Parentage (* = incorrect in U.T. Report)</u>
CX663-37-2-2-1-6	C	L72-844C-1 x CX456-90
CX744-12-2	C	Hodgson x Tracy
CX750-82	C	Harcor x Hodgson
CX773-28-3-4	C	A73D22 x Essex
CX782-257-3-1	C	Fiskeby V x "
CX859-112	C	Hobbit x Century
D49-2491	A,AX,D,N,UD	S-100 x CNS; Lee sib
-2510	D	" x " "
-2525	D,S	" x " "
-2573	R	Roanoke x N45-745
D51-4877	D	" x "
D54-2437	D,L	N48-1394 x L46-5679
D55-4166	D	Ogden x Biloxi
D56-1185	D,N	Perry x Lee
D58-3311	D	Jackson(4) x D49-2491, <u>rpx</u>
D58-3358	D,N	Jackson(4) x D49-2491, <u>rpx</u>
D59-9289	D,N	D51-4877 x D55-4166
D60-9647	E,K,LN,V	FC 31.745 x D49-2510
D61-2624	D	D49-2491(4) x PI 174.862, high protein
-3505	D	" (2) x "
-5141	D,SRF	Dorman(5) x PI 181.537,ln
D63-6042	D	D49-2491(4) x PI 163.453
-6100	D	Hill(4) x PI 171.442, <u>Rps3</u>
D64-3077	L	D49-2491(5) x Hawkeye, early maturity
-3146	L	" " x " " "
-4636	D	Hill x D58-3311
-4731	Md	Lee(2) x (Clark(2) x PI 84.631)
D65-6765	N	D59-3358 x D59-9289
D66-5566	HC	D49-2491(4) x Hawkeye, early maturity
-7398	M	D61-3505 x (PI 96.035 x D61-2624)
-12392	L	D63-6100 x Dyer
D67-135	N	D61-5141 x D63-6042
-3297	S	Hill(2) x PI 171.450
D68-18	J	Dyer x Bragg
-8847	D	Pickett x (D49-2491(5) x Arksoy, <u>Rps1-c</u> ); a Lee type resistant to SCN and PR with tawny pubescence; Pickett 71 sib
D70-3045	J	D64-4636 x D68-8847; Centennial sib
D0-9-2-1-2 (OT)	OT	[(A-7 x Altona) x P71-39] x [(A-7 x M62-173) x Holmberg 840-2-7]
F8-291 (OT)	O(Crest)	Manitoba Brown x Mandarin (Ottawa)
FH22-815 (ORC)	ORC	" " x " "
FH31-3 (ORC)	OAC,ORC	Fiskeby V x Harosoy 63
HC74-678	=L74D-678	Amsoy 71 x Ransom
-1773	HC	L15 x Davis
-3386	=HW74-3386	Williams x Ransom
-3400	=HW74-3400	" x "

<u>Strain**</u>	<u>Derived Line Prefix(es)</u>	<u>Parentage</u> (* = incorrect in U.T. Report)
HC75-5605	=H75-5605	Woodworth x V68-1034
HC78-245	SD	L72U-2567 x F7-79
II-	M	See M strains, M is substituted for II- in this index and in current Univ. of Minn. records
Ix93 (A)	C	A71-5558-1 x L61-344
Ix93-100(A)	SD	" x "
J22 (V)	V	* <u>L37-1355</u> x Arksoy 2913
J74-5	LS	Forrest x (D68-18 x PI 88.788)
J74-67-7	S	D70-3045 x F4(D68-18 x PI 88.788)
K9	HW	Tracy x Williams; =K74-104-76-104
K10	HC,HM	* " x " ; =K74-104-76-165
K74-104-75-85	LN	" x "
-76-167	HC	* " x "
-76-205	HC,LN	* " x "
-108-75-169	LN	Williams x D60-9647
-113-76-486	LN	Tracy x Pomona
-114-75-000	LN	" x Bonus
-115-75-376	LN	" x Columbus
-75-405	LN	" x "
-76-754	K	" x "
K79-1	HM	Williams x D60-9647; =K74-108-76-344
K1103	K	Union x Essex
KA 555 (M)	M	Evans x M57-69
L44-1219	S	Lincoln(2) x Richland
-1458	L	" x " ; progenitor of L46-2132
L46-2132-1	S	" x " ; from L46-2132
L58-2080	L,SL	Hawkeye x Lee
L59-738	L,OX	Harosoy(8) x Blackhawk, <u>Rps1</u> ; Harosoy 63 subline
L60-347-1-60-2B	HW	Harosoy x Higan
L61-344	A,Ix	" (6) x T117, <u>Dt2</u>
-2193	L	* Sioux x <u>Clark</u>
-2196	L	* " x __
L62-535	L	Harosoy(6) x T145, <u>dt1</u>
-667	L,OT	" x T204,e3
-973	L,ND	" x PI 86.024, <u>dt1</u>
-1055	L	Clark(6) x T201,I
-1380	L	" x T145,P1 r
-1547	L,U	" x T204,ln
-1686	L	" x PI 80.837,Pd1
-1926	L	" x PI 86.024,e2
-2257	L	Sioux x Clark
-2328	L	" x "
L63-1212	L	Harosoy(6) x T204,ln
-3534	L	(Clark(6) x T201,I) x (Clark(6) x T145,P1 r)
-0007-1	C,L	Harosoy(2) x PI 84.946-2
-2	C,L	" x "
-3	L	" x "

<u>Strain**</u>	<u>Derived Line Prefix(es)</u>	<u>Parentage (* = incorrect in U.T. Report)</u>
L63-0007-4	C,L	Harosoy(2) x PI 84.946-2
-0096-1	C,L	Clark(2) x "
L65-4050	L,U	Wayne(6) x Clark 63, <u>Rps1</u>
L66-531	H,HC,L	(Clark(6) x PI 86.024, <u>dt1 e2</u> ) x (Clark(6) x T175, <u>E1 t</u> ); = Clark- <u>dt1 E1 e2 t</u> (F10 Hawkeye x Lee) x (F10 Hawkeye x Lee) " " " " x " " x " " " " " x " " x "
-1322	L	Clark(3) x Peking
-1322-1	L	L2 x (Harosoy(6) x T117, <u>Dt2</u> ); = Harosoy- <u>Dt2 Rps1 rxp</u>
-1324	L	(Wayne(6) x Clark 63, <u>Rps1</u> ) x (Wayne(4) x L63-3534, <u>I r</u> ); = Wayne- <u>I r Rps1</u>
-2004	L	(L15(5) x L11) x (Wayne(10) x Kanrich, <u>Rpm</u> ); = Wayne- <u>Rpm Rps1</u>
L67-1250	A,L	(L15(5) x L11,r) x (Wayne(10) x Kanrich, <u>Rpm</u> )
-3526	L	Clark(2) x PI 84.946-2
L68-4096	L	L61-2193 x L61-2196
-4106	L	L2 x (Harosoy(6) x T117, <u>Dt2</u> ); = Harosoy- <u>Dt2 Rps1 rxp</u>
-0376	L	L12(6) x Hawkeye, <u>Im</u> ; = Clark- <u>I r Im Rps1 rxp</u>
L69-202	M	L66-531 x L62-535,Harosoy- <u>dt1</u> " x "
-4310	L	* Custer x <u>L16,Chippewa-I r Rps1 rxp</u>
-5347	L	L15 x Custer
L69L-3	L	Harosoy(5) x D54-2437, <u>Rps2</u>
-6-1	C,CX,H	L67-592 x L62-1251; = Clark- <u>Dt2 S</u>
L70-2283	L	L66-1322 x L62-535,Harosoy- <u>dt1</u>
-2450	L	Williams(5) x L68-4096, <u>Rps1 Rpm</u>
-6494	L	L66-531 x Miller 67
L71-1277	L	L63-3297 x Rampage
L71-3628	L	Amsoy 71 x Ransom
L72-844C-1	C,CX	L62-535 x SRF300
L72D-25-9	L	L66-531 x C1426
-549	HC	Miller 67 x L62-1686,Clark- <u>Pd1</u>
L72U-41	HC	Williams x Ransom; progenitor of Elf, Gnome, Pixie
-547	HC	Amsoy 71 x "
-640	HC	subline of Franklin
-758	HC	R62-659 x L66-531,Clark- <u>dt1 E1 e2 t</u>
-2567	HC	Miller 67 x L66L-140
-3331	HC	" " x "
L73-6536	LS	Williams(6) x T259H, <u>ms2</u>
-6626	L	Beeson x L71-1277,Clark- <u>Dt2 S</u>
L73U-632	HC	L62-535 x SRF300
-635	HC	" x "
L74-01	LN	L66-531 x C1426
-4611	L	Miller 67 x L66L-140
L74D-2	HC	Amsoy 71 x Ransom
-4	HC	
-7	HC	
-20	HC	
-200	HC	
-678	HC	

<u>Strain**</u>	<u>Derived Line Prefix(es)</u>	<u>Parentage</u> (* = incorrect in U.T. Report)
L75-8003	L	Williams x L70-2283
-8016	L	" x "
-8020	L	" x "
-8211	L	" x L70-2450
-0570	M	Wells(6) x T259H, <u>ms2</u>
L75U-495	HC	* L72D-25-9 x Dare
L76-0038	L	Williams x Kosamame(PI 171.451)
-0474	HS	Steele x Sodendaizu(PI 229.358)
L77-756	M	Beeson x Cloud
-906	M,S	Williams x PI 209.332
-1233	S	Union x (Williams x PI 88.788)
-1836	HC	Williams(7) x Harrel, <u>Rps1-b</u>
L78-189	M,W	Corsoy(8) x Kingwa, <u>Rps1-k</u>
-4054	L	Williams x PI 90.138
-4094	L	Beeson x L68-0376
-4245	L	L68-4106 x L68-0376
-8694	L	L71-3628 x Elf
-9069	L	L73-4124 x "
L78L-449	L	" x Essex
-688	L	L73-6626 x "
L81-4583	M	* Williams(6) x PI 157.440, <u>ti</u> ; Kunitz sib
LN78-2123	LN	Evans x Amsoy
-2714	LN	" x K1028
LN80-8309	LN	A76-304020 x Land O Lakes Max
-9447	LN	Weber x A76-202015
-9452	LN	" x "
-9479	LN	" x "
-11178	LN	A76-202015 x A76-304020
LNX8107	LN	A78-227015 x PI 92.718-2
LNX8115	LN	HW79149 x A78-121014
LNX8132	LN	Hack x A78-121014
LNX8138	LN	" x PI 92.718-2
LNX8141	LN	" x Cumberland
LNX8179	LN	NK S1492 x PI 92.718-2
LS77-13	LS	D68-18 x PI 88.788
LS78-W124-1	LS	Franklin x J74-5
-W245	LS	" x "
LS79-W220	LS	Forrest x V71-480
LX1061-9-9	C,CX	Lincoln x Ogden
-9-15	C,CX	" x "
-9-30	CX	" x "
-9-35	CX	" x "
M323	M	Hawkeye x Capital
M42-4	M	Lincoln(2) x Richland
-4-6	M	" " x "
-37	M	" " x "
M44-46	M	" " x "

<u>Strain**</u>	<u>Derived Line Prefix(es)</u>	<u>Parentage</u> (* = incorrect in U.T. Report)
M53-43	M	M10 x PI 180.501
M54-12 (=M384)	M	Renville x Capital
-132	M	M10 x Capital
-139	M	Renville x Capital
-232	M	M42-4 x Korean
-240	M	* Korean <u>x</u> M42-37
M55-19	M	Acme x Hardome
M57-69	KA	M10(2) x PI 180.501
M61-20	M	Merit x Comet
M63-158	M	Shika No. 1(PI 261.475) x Pridesoy II
-217Y	M	yellow hilum sib of Hodgson
M64-56	M	* Traverse x PI 257.436
-185	M	Chippewa 64 x Amsoy
M65-227	M	057-2921 x JA42(=Kogane Jiro = PI 317.335)
M67-66	M	Clay x M406
-141	M,OX	Corsoy x Wayne
M68-49-26	M	* Evans x M59-120
-126	M	* M61-65 x "
-256	M	Evans x Steele
-303	M	M60-406 x Beeson
M69-42	L,M	M63-158 x Provar
-45	M	" x "
-247	M	* M60-406(2) <u>x SRF300</u>
-288	M	Merit x D66-7398
-305	M	M62-93 x Lee
M70-70	M	Evans x PI 291.322
-135	M	* " <u>x M63-217Y</u>
-163	M	M59-120 x Hodgson
-184	M	Steele x (Evans x Lee)
-271	M	Merit x M64-3
-294	M	JA53-7-6(PI 358.323) x M63-217Y
-417	M	M64-3 x M63-217Y
-436	M	Evans x M64-3
-440	M	Steele x (Evans x Lee)
-447	M	Provar x M53-43
M70-484	M	M63-87 x M53-43
-504	M	" x Bitterhof (PI 189.880)
M71-26	M	* Clay x M63-217Y
-77	M	Merit x M62-263
-135	M	Evans x "
M72-26	M	" x Wells
M73-105	M	M68-49 x Clay
-129	M	" x Hodgson
M74-160	M	Pike x M64-157
-179	M	M68-256 x Clay
-227	M	M68-49 x M63-194
-270	M	M65-69 x M68-99

<u>Strain**</u>	<u>Derived Line Prefix(es)</u>	<u>Parentage</u> (* = incorrect in U.T. Report)
M74-359	M	M70-187 x Altona
-394	M	Hodgson x Wells
-399	M	" x "
M75-48	M	Wilkin x M65-442
-89	M	Corsoy x M68-303
-131	M	M68-37 x Northrup King S1244
-243	M	Evans x A73-19084
-274	M	" x L70T-543
-299	M	M69-288 x (M)554-5
-322	M	M68-49-26 x Hodgson 78
M76-142	M	M70-271 x Corsoy
-148	M	" x Hodgson 78
-260	M	Harlon x M69-197
-349	M	L69-202 x M69-45
-402	M	FR61 I x (Hodgson(6) x Merit, <u>Rpsl</u> )
M77-55	M	M68-49-26 x A74-104034
-75	M	Coles x M66-30
-120	M	M70-440 x M69-42
-164	M	M70-150 x Vickery
-210	M	M71-135 x Simpson
M81-79(p)	M	M68-49-26 x M70-184
-610	M	Dawson x M70-447
(M)554-3	M	Hodgson(4) x Merit, <u>Rpsl</u>
-5	M	" " x " "
-8	M	" " x " "
-10	M	" " x " "
Md71-583	V	(York x Mukden) x (Delmar x D64-4731)
-1643-82	Md	Adelphia x PI 157.483
Md77-5675	Md	V68-1171 x Columbus
MM-21 (C)	C,CX	from Manchu
-31	C,CX	" "
N44-92	N	Haberlandt x Ogden
N45-745	D,N	Ogden x CNS
-1497	R	Ralsoy x Ogden
-2994	N	" x "
N48-1248	D,S	Roanoke x N45-745
-1394	D	" x "
-1867	N	" x "
N55-3818	N	(N45-2994 x Ogden) x (N44-92 x N48-1867)
-5931	N	Roanoke x D49-2491
N63-858	Coker	D58-3358 x D59-9289
N64-2451	N	(N55-5931 x N55-3818) x D56-1185
N70-1549	N	Dare x D65-6765
N72-3213	N	D67-135 x N64-2451
N77-179	Md	N70-1549 x N72-3213
OX611	OT	Harcor x (SRF200 x OX708); <u>Dt2 e3 ln</u>
OX708	OX	L62-361 x L59-738(Harosoy 63); Harosoy- <u>Dt2 Rpsl</u>

<u>Strain**</u>	<u>Derived Line Prefix(es)</u>	<u>Parentage (* = incorrect in U.T. Report)</u>
P71-39 (OT) PMGT-C (HM)	DO HM	Acme x Blackhawk Cycle of recurrent selection population with parents A75-103019, A76-202015, A76-304005, Cumberland, Pella, Agripro 26, Century, Northrup King S1346, Pfizer Genetics CX276, Pride B216) (Crop Sci. 24:213, 1984)
PRX9-249 (C)  -274 (C)	C  C,CPRX	<u>Rps1-c Rps3</u> from PI 86.972-1, <u>Rps3</u> x PI 54.615-1, <u>Rps1-c</u> same as above
PRX12-112 (C)  -305 (C)	C  C,CPRX	* <u>Rps1-b Rps3</u> from PI 86.972-1, <u>Rps3</u> x PI 84.637, <u>Rps1-b</u> * same as above
PRX54-53-2 (C) PRX54-59 (C) PRX58-35 (C)	A C C	Harosoy x Altona, <u>Rps6</u> " " " <u>Rps3 Rps6</u> from PI 86.972-1, <u>Rps3</u> x Altona, <u>Rps6</u>
R54-168	R	D49-2573 x N45-1497
R62-659	L	(R54-168 x Hill) x (Lee x Dortchsoy 110)
R64-500	L	Hill(6) x Arksoy, <u>Rps1-c</u>
S55-7075	S,V	N48-1248 x Perry
S62X30:1	L,S	* (Clark(2) x L46-1503) x [(Clark 63 x <u>L46-2132(2)</u> ) x ( <u>L46-2132</u> x (Clark x Kanrich))] L66L-140 x Columbus
S75-212	S	[Hill(2) x Kisaya(PI 171.450)] x Essex
S76-2203	K	D67-3297 x L73-827
S78-5078	S	Clark x (Scott(2) x Peking) " x " " "
SS65-5701 -5702	M,S M	from Heilongjiang, China, in 1931 Manchu x Ebony
Strain 171 (OX)	O	AK114(from AK) x PI 65.394(discarded)
T48	L	from Illini ( <u>y3</u> mutant or outcross?)
T117	C,L	origin not recorded " " "
T139	L	T181(non-nodulating <u>rj1</u> mutant in Lincoln(2) x Richland) x T180(F3 <u>Rj1</u> sib of T181)
T145	L	T136(PI 88.351 x Rokusun) x T122(unknown origin)
T175	L	magenta flower mutant ( <u>wm</u> ) in Harosoy
T201	A	
T204	L	
T235 (L58-272)	L	

NOTE: The following T-strains were removed from the Type Collection in 1981  
by decision of the Soybean Genetics Committee and are maintained under their  
original PI designation:

T69 = PI 64.698	T141 = PI 84.987	T240 = PI 91.160
T85 = PI 47.131	T203 = PI 54.619	T245 = PI 86.024
T106 = PI 101.404	T207 = PI 80.837	T247 = PI 81.763
T109 = PI 84.631	T215 = PI 85.505	T248 = PI 83.945-4
T125 = PI 91.073	T217 = PI 196.166	

<u>Strain**</u>	<u>Derived Line Prefix(es)</u>	<u>Parentage</u> (* = incorrect in U.T. Report)
Ts76-989	LS	Forrest x V71-480
U66434	UC	* FC 04.007B x Clark 63
U75326	U	PI 68.474-1 x PI 70.202
U86413	U	" x "
UM-S58-544	OAC	Blackhawk x PI 194.633
V63-76	V	Hill x D53-354
V66-318	V	D53-184 x J22
V68-920	V	York x Dare
-1034	H, HC	" x PI 71.506
-1038	HC	" x "
-1171	Md	PI 80.837 x V63-76
-2331	V	" x Clark
V69-862	V	Hood x D60-9647
V71-480	Ts, LS	V63-76 x V66-318
-793	V	Delmar x "
-807	S	" x "
V76-595	KY	V68-920 x V69-862

#### Parent Strains with Designations Derived from Variety Names

AK114	T	selection from AK
Amsoy 71 dt (C)	C	"determinate mutant" M2 plant from EMS-treated Amsoy 71
Arksoy 2913	J,V	determinate bulk selection from Arksoy, which originally had determinate and indeterminate plants (Arksoy 2913 and original Arksoy consisted of white and purple flowered plants. The strain of Arksoy presently in the germplasm collection is white-flowered and determinate.)
Bavender Special-2	C	selection from Bavender Special
B.H. Manchu	A	typical selection from Manchu (Black Hilum Manchu) from Manchu
Manchu A(T95)(L)	H,Chief,Viking	phytophthora-resistant selection from Mead
Mead PR (U)	U	selection from Pagoda
Pagoda 2	UM	" " "
Pagoda 25	M	from Wells(8) x Arksoy,Rps1-c; Wells II sub-line
Wells BC 7-19-1 (C)	C	

Parent Strains from Other Countries

<u>Strain**</u>	<u>Derived Line Prefix(es)</u>	<u>Parentage</u> (* = incorrect in U.T. Report)
Amurskaya 41 F7-79	W HC	= PI 290.119, from Soviet Union Mamloxi x CPI 26673 (from Morocco); from Don Byth, CSIRO, Brisbane, Australia
Fiskeby III Fiskeby V FR 51 IV(Minn.)	OT FH,OAC,CX M	= PI 196.491, from Sweden = PI 360.955, " " Amsoy 71 x Chippewa 64, from France via University of Minnesota
FR 61 I(Minn.)	M	Same as above
Holmberg 201-14-18	UM	= Fiskeby III; see PI 196.491
Holmberg 744-2	O	= PI 194.641
Holmberg 753-1	O	= PI 194.654
Holmberg 827-4	BC,OT	= PI 438.473
Holmberg 840-2-7	DO	= PI 438.475
Holmberg 840-7-3	BD,OT	= PI 438.477
JA42(Minn.)	M	= PI 317.335, Kogane Jiro, from Japan via University of Minnesota
JA53-1(Minn.)	M	= PI 358.320 from China via Japan via U. of Minn.
JA53-7-6(Minn.)	M	= PI 358.323 " " " " " "
Kizaya-1	A	= PI 171.450, from Japan
Moscow	M	unknown
Nagyszemu Feher	M	= PI 297.518 from Iregszemce Exp. Sta., Hungary, in 1972
R79(Minn.)	M	from Russia via University of Minnesota
Salut 216	W	= PI 295.952; from Russia
Tokachi Nagaha	M	= PI 196.163; from Japan to Minnesota in 1962
UFV-1	C	rogue in Vicoja which is F61-2890 (D49-2491(2) x Improved Pelican); from Brazil

## Parent Strains from Private Seed Companies

<u>Strain*</u>	<u>Derived Line Prefixes†</u>	<u>Parentage (* = incorrect in U.T. Report)†</u>
Agripro 25	A	Beeson x Calland
Agripro 26	H, HM	C1426 x "
Agripro 27	A	Cutler x "
Agripro 35	A	L15 x Cutler
Agripro 1120	A	= IVR 1120
Agripro 1235	M	blend of 75% IVR 1120: 25% Steele
Agripro AP 200	A, E	CX407BC7-255 x Swift
Agripro AP 225C	A	Beeson x Hark
Agripro Ex 7710	A	= Agripro 27
Agripro Ex 50734	A	= Agripro 35
Agripro HP 20-20	A	* <u>Rampage x Hark</u>
Agripro HP 2530	A	L15 x C1431
Asgrow A1564	A, M	Hark x C1453
Asgrow A1895	ORC	A2575(C1453 x Amsoy 71) x L73-827
Asgrow A1937	AM, A, E, HM, M	* <u>Hodgson x L72-1419</u>
Asgrow A2440	A, M	* <u>Amsoy x PI 28.019(Soysota)</u>
Asgrow A2656	A, LN, M	* <u>M60-406 x W63S-184</u>
Asgrow A2943	HS	Asgrow A1564 x Asgrow A3127
Asgrow A3127	A, H, HM, HS, K, U, LN	Williams x Essex
Asgrow A3300	A	Beeson x Calland
Asgrow A3585	A	L66L-140 x Cutler
Asgrow A3659	A, K	Williams x Essex
Asgrow A4268	K	Asgrow A1564 x Asgrow A3127
Asgrow XP1564	A	= Asgrow A1564
Coker 237	HC	Hutton x N63-858
Coker Hampton 266A	L	Majos x Lee
Dortchsoy 110	R	Ogden x Wabash; Dortch Seed Farms
GL 2634	E	Great Lakes Hybrid
Gold Tag GT 1250	HM	C1453 x C1431, Nickerson American Plant Breeders
Green 759	LS	Dorman x SRF 400
Hofler Censoy	A	IVR1120 x SL12 ?; Midwest Oilseeds, Inc.
Hy Vigor Rowtunda	A	IVR 1120 x Wells ?; Midwest Oilseeds, Inc.
IVR 1120	A, MO, NAPB	* Provar x (AX56P64-1 x PI <u>91.110-1</u> )
IVR 4311	A, HW, MO	Hack x Wayne
IVR 4731	A, MO	Amsoy x "
IVR Ex 212	A	Corsoy x [(Provar x (A59-850 x Magna))]
IVR Ex 1120	MO	= IVR 1120
IVR Ex 4311	A, HW, MO	= IVR 4311
IVR Ex 4426	A	Amsoy x Wayne
IVR Ex 4428	A	Corsoy x "
IVR Ex 4731	A, MO	= IVR 4731
IVR Ex 5003	A	= Pike
Jacques 88	M	Corsoy x Hodgson
Jacques J102A	M	" x PI 88.029
Jacques J103	A, M	Clay x Williams

<u>Strain*</u>	<u>Derived Line Prefixes†</u>	<u>Parentage (* = incorrect in U.T. Report)†</u>
Jacques J231	A,AC,AM	(Hodgson x Calland) x Corsoy
Jewel	ORC	Corsoy x Wells; W.G. Thompson & Sons, Blenheim, Ontario
Land O Lakes Max	A,LN	[Wayne x (Clark x Adams)] x Cutler
Land O Lakes L4404	A	Amsoy 71 x Pike
Land O Lakes LL4102	A	= Land O Lakes Max
Land O Lakes LL4404	A	= Land O Lakes L4404
Madison GL2810	HS	S20(L15 x C1423) x Hark; Midwest Oilseeds via Madison Seed Co., London, OH
Marshall	NAPB	* Provar x (A55-5629-4 x PI 248.404); Improved Variety Research
Merschman Cheyenne	A	(L15 x C1423) x Hark; Midwest Oilseeds, Inc.
Merschman Washington	A	Amsoy x Wayne; Midwest Oilseeds, Inc.
Merschman Washington V	A	IVR 1120 x Calland; Midwest Oilseeds, Inc.
Midwest Oilseeds 2050	A	(L15 x C1423) x Hark
Midwest Oilseeds 3010	A	unknown x Mitchell
Migro HP 20-20	A	= Agripro HP 20-20
Migro HP2530	A	= Agripro HP 2530
Miller 67	L	perhaps from Korea, Peterson Seed Co.
Mitchell	Ky,L,LS,MO	Amsoy x Wayne; Improved Variety Research
MRC Cheyenne	A	= Merschman Cheyenne
NAPB EX 4380	A	= HS235, C1426 x Marshall
NAPB EX 9649	A	IVR 1120 x Beeson
NAPB HP 20-20	A,M	= Agripro HP 20-20
NAPB HS 235	A	C1426 x Marshall
NK 846 Exp.	A	= NK S1346
NK 9414 Exp.	M	= NK S1244
NK 9436 Exp.	M	= Pride B216
NK S1244	M	Corsoy x Wayne
NK S1346	A,E,HM	A55-5629-4 x PI 257.435
NK S1492	A,HA,HW,LN,LNX	Corsoy x Wayne
NK S4055	A	Beeson x Cutler
Peterson 85	M	Provar x (Amsoy x PI 248.404, Novosadska Bela)
Peterson 118-11	A	Corsoy x (Hawkeye x Chippewa)
Peterson 1677	M	= Pioneer 1677
Peterson 3100 brand	M	50% P61-22 + 50% Wells
Peterson P61-22	M	Corsoy x (Magna x Provar)
Peterson PX20	M	= Peterson 3100 brand
Pfizer CX276	HM,HW	Wayne x Amsoy 71
Pfizer CX290	LN	unreleased pedigree
Pike	A,M,LOL	* Provar x (AX56P64-1 x PI 91.110-1); Improved Variety Research

<u>Strain*</u>	<u>Derived Line Prefixes†</u>	<u>Parentage (* = incorrect in U.T. Report)†</u>
Pioneer 1677	M	Corsoy(2) x Rampage
Pioneer 1981	ORC	Beeson x Williams
Pioneer 0877	M	(Clark x Chippewa 64) x Corsoy
Premier	OT	= Pride B216
Pride B152	A,AC,ORC	Northrup King S1346(6) x Mack, <u>Rpsl-c</u>
Pride B203	A	* Pride <u>B216</u> (6) x (Mack, <u>Rpsl-c</u> x Corsoy)
Pride B216	A,HA,HM,HW,M	Corsoy x Wayne
Pride B236	AM	NK S1346 x Agripro 25
Pride PEX110	AM	= Pride B236
Pridesoy II	M	unknown
Profiseed 1138	A	Hark x PI 68.430; Profiseed, Inc. Hampton, IA
Prosoy PS104	E	not available; Proseed Co.
Quebec 92	H	unknown
Riverside 2024	A	Wayne x Pride B216; Jacques Seed Co.
Schechinger S48	A,HS,LN	IVR 1120 x SL12; Midwest Oilseeds, Inc.
Shawnee	HM	Corsoy x C1423; Asgrow Seed Co.
SRF 100	ND	Chippewa 64(8) x D61-5141, <u>ln</u>
SRF 150	ND	Hark(7) x (Wayne(3) x D61-5141, <u>ln</u> )
SRF 300	L,M	Wayne(7) x D61-5141, <u>ln</u>
SRF 350	A	Wayne(3) x " "
SRF 400	V	Clark 63(7) x D61-5141, <u>ln</u>
Stine 3200	A	[(Corsoy x Wayne) x Calland] x (C1426 x Calland); Midwest Oilseeds, Inc.
Thompson T7803	OT	Wells x Williams
Thompson T8112	ORC	Harwood x Williams
TriValley Charger	A	IVR 1120 x Calland; Midwest Oilseeds, Inc.
TriValley Charger III	A	Mitchell x Cutler 71; " " "
Washington XK 505	A M	Hark x Wayne; Nickerson American Plant Breeders off-type found in Calland; Teweles Seed Co.

\*Identification of originating companies by strain designation prefixes:

Agripro: Nickerson American Plant Breeders  
Asgrow: Asgrow Seed Co.  
Coker: Coker's Pedigreed Seed Co.  
IVR: Improved Variety Research, Inc.  
Jacques: Jacques Seed Co.  
Land O Lakes (LOL): Land O Lakes, Inc.  
Midwest Oilseeds: Midwest Oilseeds, Inc.  
Migro: Nickerson American Plant Breeders  
NAPB: Nickerson American Plant Breeders  
NK: Northrup King Co.  
Peterson: Peterson Seed Co., now Pioneer Hi-Bred Int'l  
Pfizer: Dekalb-Pfizer Genetics  
Pioneer: Pioneer Hi-Bred Int'l  
Pride: Northrup King Co.  
SRF: Soybean Research Foundation, Mason City, Illinois  
Thompson: W. G. Thompson and Sons, Blenheim, Ontario

† LOL = Land O Lakes, MO = Midwest Oilseeds, NAPB = Nickerson American Plant Breeders.  
Others are public strain prefixes as used in the Uniform Tests (page vi).

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**PUBLIC VARIETIES ARRANGED BY EXPERIMENTAL DESIGNATIONS**  
 (Letters in parentheses were sometimes omitted.)

<u>Experimental Designation</u>	<u>Variety Name</u>	<u>Experimental Designation</u>	<u>Variety Name</u>
A43-107 + -108	Hawkeye	A87-192020	o IA2002
A45-2683	Adams	-193011	o IA2004
A46K-937	Blackhawk	-193012	o IA2003
A50-4745	† Kim	-195032	Newton
-5039	† Kanrich	-196014	IA2008
-8618-2	Ford	-297015	IA2007
A61-439	Corsoy	A89-256100	o IA2009
-540	Hark	-257055	o IA2006
-939	Amsoy	-257058	o IA2010
-1051	Provar	-257070	o IA1003
A62-5405	Rampage	-257085	o IA1002
-5407	Wirth	ABSR 101BC	Archer
A73-128	Coles	(A)Elgin BC	Elgin 87
-227	Marion	A Hardin BC(k)	Hardin 91
-25050	Sloan	(A)Harper BC	Harper 87
A74-201010	Vinton	(A)Weber BC	Weber 84
-302012	Pella	AHW Pella BC	Pella 86
-303012	Cumberland	AX80-21	Disoy
-303013	Oakland	AX84-90	Magna
A75-102032	Weber	-98	Prize
-302005	BSR 301	C28	Earlyana
(A75-)Corsoy R3	Vickery	C169	Gibson
A76-102009	Hardin	C463	Wabash
-304019	BSR 302	C612	Perry
A77-112023	Lakota	C1068	Kent
A78-227013	BSR 201	C1117	Lindarin
A79-133019	Elgin	C1225	Adelphia
-336014	Harper	C1278	Cutler
A80-149020	BSR 101	C1294R	Lindarin 63(BC4)
A81-257031	Preston	C1315	Lindarin 63
A83-273009	Conrad	C1376	Protana
-378001	o LS301	C1429	Beeson
A84-380002	o LS201	C1437	Calland
A85-182004	o HP204	C1470	Wells
-182007	o HP201	C1474	Bonus
-182010	o HP203	C1481	Cutler 71
-182013	o HP202	C1545	Century
-193023	Marcus	C1653	Spencer
-291001	Kenwood	C Beeson PR3	Beeson 80
A87-102102	o SS201	(C)Beeson 80 BC6	Keller
-102105	o SS202	C-Union BC	Regal
-102105-4	o IA2005	(C)Wells BC6	Wells II
-191039	o IA1001	(C)Wells II BC6	Miami
-192019	o IA2001	(C)Williams BC6	Winchester

<u>Experimental Designation</u>	<u>Variety Name</u>	<u>Experimental Designation</u>	<u>Variety Name</u>
CX407BC7	Amsoy 71	L66L-172	Woodworth
CM30	Morsoy	L71L-436	† Franklin
FC 03.654A	Seneca	L73D-195	Amcor
H5	Monroe	L74D-609	Pixie
H20771-9	Madison	-611	Elf
H21793-7	Henry	-618(HW4-618)	Gnome
H24157-4	Ross	L74L-125	Lawrence
HC77-2204	Ripley	L75-3674	Corsoy 79
HC78-523	Hoyt	L76-129B	CN 290
HC Amcor	Amcor 89	-141B	CN 210
(HC)Gnome Rpsl-k	Gnome 85	L78-1444	Fayette
HC Hobbit BC	Hobbit 87	L80-3049	Cartter
HC Sprite BC	Sprite 87	L81-4590	o Kunitz
HM8469	Flyer	L82C-1246	† Linford
HM8471	Resnik	L83-3804	Spry
HM8473	GR8836	L84-3775	o IL1
HM8482	Hayes	L85-6899	o IL2
HM8486	GR8936	LN78-1136	Hack
HM8597	Edison	LN80-8478	Chamberlain
HM8625	Chapman	LN82-2366	Hamilton
HM8735	Erie	-9648	Burlison
HW74-618	Gnome	LN83-2356	LN83-2356
-3384	Sprite	-3824-1	Jack
-3385	Hobbit	LN85-874	Bell
HW8033	Zane	LS78-248	o Egyptian
HW8067	Sherman	LS78W-110	Pyramid
HW8185	Century 84	LS82-(W)1206	o Pharaoh
K62-7221	Columbus	LS83-5616	Nile
K1004	Pomona	M2	Renville
K1019	Crawford	M393(II54-53)	Clay
K1024	DeSoto	M417	Traverse
K1033	Douglas	M424	Norman
K1041	Sparks	M54-160	Anoka
Ky79-0237	Pennyrite	M59-121	Swift
L1	Chippewa 64	-213	Steele
L21	Union	M61-52	Wilkin
L22	Will	-60	Ada
L23	Williams 79	-96	Evans
L24A	Williams 82	M63-217Bf	Hodgson
L36-685	Lincoln	M65-217	McCall
L46-8275	Chippewa	-295	Grande
L49-5138	Clark	M70-128E	Dawson
-5139	Shelby	-153	Simpson
L57-2222	Wayne	M71-43	Ozzie
L59g-1R	Harosoy 63	M74-12	Glenwood
-2R	Hawkeye 63	-62	Sibley
L66L-108	Williams	-355	Chico

<u>Experimental Designation</u>	<u>Variety Name</u>	<u>Experimental Designation</u>	<u>Variety Name</u>
M75-1	Hodgson 78	OX643	Harlon
-25	Dassel	OX733	o Harovinton
M77-251	Proto	OX-Hodgson 1cHm	Haroson
M81-382	Kato	PI 54.563-3	Boone
-384	Sturdy	PI 65.344	Ontario
M82-106	Kasota	PI 70.218-2-19-3	Patoka
M83-108	Leslie	S5	Custer
-899	Bert	S-100	† S-100
M86-2372	Minnatto	S52-7158	Scott
Md62-3303-3	Wye	S62-4051	o Oksoy
Md71-407	Miles	S76-2109	Pershing
Md79-5043	Morgan	S79-4259	o Avery
Md83-2048	Bass	S82-1443	o Delsoy 4900
-5008	o Manokin	S83-1004	Delsoy 4500
Md85-5443	Corsica	S85-1084	Delsoy 4210
03-33 (OX)	Hardome	-1163	o Delsoy 4710
O-17 (P-17)(OT)	Acme	SL1	Clark 63
O48-36 (OT)	Comet	T118	† Viking
O51-318+322(OT)	† Crest	T119	† Chief
O55-2065 (OT)	Merit	U11406	Nebsoy
O73-15 (OT)	Maple Arrow	U36276	Mead
0-378-28 (OX)	Harwood	U56355	Platte
OAC81-2	Bicentennial	U75633	Logan
-06	o OAC Pisces	U76360	Fremont
OAC82-07	OAC Libra	U85-74089	Dunbar
OAC83-01	o OAC Scorpio	UD65-3217	o Emerald
-07	o OAC Aries	UD321-5	Bethel
OAC84-06 (SB77-23)	o OAC Musca	UD672	Delmar
OAC85	Vansoy	UD3210-31-14	Verde
OAC85-06	o OAC Dorado	UM4 (S56-142)	Portage
OAC86-01	o OAC Eclipse	UM15 (S59-377)	Altona
OAC87-02	o OAC Frontier	V66-180	† Essex
OAC88-01	o OAC Vision	V68-1242	o Ware
-08	o OAC Shire	V74-315	† Stafford
-12	o OAC Talbot	W46S-292	Grant
ORC-8502	RCAT Alliance	W48S-1460	Norchief
ORC-8601	RCAT Persian	W61-4221	Dunn
ORC-8801	RCAT Angora		
ORC-8803	Brock		
OT80-1(Au313)	Maple Amber		
-12Y(K22-3-B-1)	Maple Ridge		
OT81-5(K151-11-B-6)	Maple Isle		
OT82-2	o Canatto		
OT83-4(X921-33-1)	Maple Donovan		
OT84-3	o Nattosan		
-12(X973-8-B-4)	Maple Glen		
OX271	Harcor		

<u>Nonstandard Experimental Designation</u>	<u>Variety Name</u>
1B/41 (OX)	† Harly
3-23/45 (OX)	† Harosoy
A.K. 3 (L)	† Illini
B-B-4-6-3-3	o Kahala
B-B-4-7-1-3	o Kailua
B-B-24-9-3-6	o Kaikoo
B-C-28-1-2-2	o Mokapu Summer
BD 21117 (OT)	Maple Presto
Illinois 13-19	o Ilsoy
Manchu 831 (SD)	Manchukota
MM-35(Purdue No. 2)	† Mandell
Ohio 31-4	o Granger
Ohio 13177	† Manchuria 13177
Ohio 20173	o Manchuria 20173
Ohio Manchu 1	† Mingo
Wisconsin 839-14	Flambeau
X390-73 (OT)	o Nattawa

† Tested in Uniform (or Preliminary) Tests,  
only after commercial release.

o Not tested in Uniform or Preliminary Tests.